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6-Oct-81 18:12:43

Changes from Affirm version 130

These functions have changed:

AND1\Nary Changed by ERICKSON at 25-Sep-81 13:38:59 from TEDIT
Properly embeds result in IFOP, returns TRUE if no args.

AddAutoRules Changed by ERICKSON at 25-Sep-81 13:42:46 from NEW
New function. A central place for adding rules of type 'automatic'. (Embodies arcane knowledge about the rewriterule package.)

AddCommandToHistory
Changed by ERICKSON at 25-Sep-81 13:43:29 from AFFIRMEXEC
Commands in the list HistorylessCommands (such as stop; or exec;) are not recorded in the history list. This is so a sequence like

```
axiom foe(x,s apr y) = ...  
↑G Please provide an interface for foe...  
(1) stop;  
fix;
```

will work, instead of passing the 'stop' command to the editor. Note that commands like 'ok' are dangerous to put on this list, since they have side effects (sub-events being implemented wrong).

AddLEntry Changed by ERICKSON at 25-Sep-81 13:44:43 from NEW
Adds an entry to LGraph. Used by UnspecifiedLHSides, as part of the 'nochange' computation.

AddParametersToHistory
Changed by ERICKSON at 25-Sep-81 13:50:42 from AFFIRMEXEC
Don't put HistorylessCommands on history. See AddCommandToHistory.

AddSpecifiedLHS Changed by ERICKSON at 25-Sep-81 13:53:36 from NEW
Given a left-hand side, adds it to LGraph as appropriate. Used by UnspecifiedLHSides, as part of the 'nochange' computation.

ApplicableRuleType
Changed by ERICKSON at 25-Sep-81 13:54:19 from NEW
What is the type of the (first) rule applicable to this left-hand side? Coded up, but not necessarily useful.

ArgumentVars Changed by ERICKSON at 25-Sep-81 13:56:58 from NEW
Computes a list of variables which are suitable as type-correct arguments to a function. Is given the type information, possibly with suggested variable names. Used by DeclareFun and the automatic package.

- CannedMessage** Changed by ERICKSON at 25-Sep-81 13:57:54 from FORMULAIO
Added categories 'inconsistent' (for command used several times in different ways) and 'illegal' (for bad user format in names, etc).
- Combinations** Changed by ERICKSON at 25-Sep-81 13:58:55 from NEW
Returns all combinations of elements from several lists.
- Completer** Changed by ERICKSON at 25-Sep-81 13:59:52 from LOGIC
Treats Unchecked undoably. This matter needs to be looked into!
- Constructors** Changed by ERICKSON at 25-Sep-81 14:01:57 from NEW
Utility: computes the constructor set of a type.
- CreatePatchFile** Changed by ERICKSON at 25-Sep-81 14:03:04 from REQUEST
Recorded and commented for comprehensibility. Hope it works.
- DeclareFun** Changed by ERICKSON at 25-Sep-81 14:03:48 from SPECIFICATION
Now calls ArgumentVars. rather than doing the whole computation itself.
- DeclareType** Changed by ERICKSON at 25-Sep-81 14:04:35 from SPECIFICATION
Added Distinct and NoChange type properties.
- Distinct** Changed by ERICKSON at 25-Sep-81 14:05:43 from NEW
New function. Generates automatic equality axioms, which specify that the functions are unequal and 1-to-1. May be called repeatedly.
- distinct** Changed by ERICKSON at 25-Sep-81 14:07:57 from NEW
New command function. Checks parameters, records itself on type's property list, calls Distinct.
- DWIMUSERFN** Changed by ERICKSON at 25-Sep-81 14:09:12 from UTILITY
Now sets primed uba's not of the current type; this can arise when first printing a type that was Loaded.
- ExtendUsingList** Changed by ERICKSON at 25-Sep-81 14:10:38 from NEW
Utility: given a short atom and a list of long ones, return the corresponding long. May be asked to generate an error upon failure. Useful for translating function names provided by the user.
- GeneralLHS** Changed by ERICKSON at 25-Sep-81 14:11:33 from NEW
Extended, so it may be given an expression (with NIL for vars); in this case, it fills in all variable slots. Also now takes a list of variable names to avoid.
- GenerateReflexiveRule**
Changed by ERICKSON at 25-Sep-81 14:14:38 from NEW
New function. Declares 'dummy' and produces rule 'dummy=dummy -> true'; this was formerly done by ProcessCommand through fake commands. (Uses AddAutoRules.)

- InitializePart1** Changed by ERICKSON at 25-Sep-81 14:15:32 from <AFFIRM>CPATCH-122..5
No longer sets UCaseParseAtoms; this is done by hand, since it doesn't include ReserveWordList.
- InitialLHSGraph** Changed by ERICKSON at 25-Sep-81 14:17:22 from NEW
Returns an LGraph with a single, most general entry. Used in the 'nochange' computation.
- IsType** Changed by ERICKSON at 25-Sep-81 14:18:00 from SPECIFICATION
Extended functionality: now returns the type name if true.
- LeftHandSides** Changed by ERICKSON at 25-Sep-81 14:18:15 from NEW
Returns the left-hand sides, given an extended name.
- listRewriteRules** Changed by ERICKSON at 25-Sep-81 14:18:33 from FORMULAIO
Added rule type automatic. Also uses SELECTC, so rule kind names aren't quoted in the code.
- listTypeAutos** Changed by ERICKSON at 25-Sep-81 14:18:50 from NEW
Prints out the distinct and nochange commands as part of a type listing. (They fall at the end.)
- listTypeParts** Changed by ERICKSON at 25-Sep-81 14:19:08 from FORMULAIO
Added rule type Automatic, default not printed. Rather than add another profile entry, automatic rules are always grouped. Now uses SELECTC and RuleTypes (at compile time), rather than quote names like 'axiom'.

Also added type parts nochange and distinct.
- mapEntryFunction** Changed by ERICKSON at 25-Sep-81 14:19:36 from REQUEST
readability.
- Minimize** Changed by ERICKSON at 25-Sep-81 14:19:51 from NEW
Returns x such that f(x) is smallest.
- MoreGeneralExprs** Changed by ERICKSON at 25-Sep-81 14:20:05 from NEW
Is one expression a generalization of another? Assumes that variables have been replaced by NIL.
- MoreGeneralThan** Changed by ERICKSON at 25-Sep-81 14:20:21 from NEW
Is one expression a generalization of another? Assumes that variables have been replaced by NIL.
- NILHS** Changed by ERICKSON at 25-Sep-81 14:21:40 from NEW
Used by the nochange package. Given a function name, returns a skeleton call with NILs for the arguments.

- nochange** Changed by ERICKSON at 25-Sep-81 14:22:37 from NEW
New command function. Checks parameters, records itself on type's property list. calls NoChange.
- NoChange** Changed by ERICKSON at 25-Sep-81 14:23:21 from NEW
New function. Produces automatic axioms stating that selectors are unchanged across constructor arguments. This is done for selector/constructor pairs which aren't already specified; it is only possible when constructor has exactly one argument of the proper type (otherwise, we don't know towards which arg to recurse). May be called repeatedly.
- NonConstructorsUsed**
Changed by ERICKSON at 25-Sep-81 14:24:20 from NEW
Checks whether a left-hand side refers in its arguments to datatype extenders or selectors. Returns those ops, if any.
- NPrimes** Changed by ERICKSON at 25-Sep-81 14:25:05 from LOGIC
Added arg to Numerify call.
- Numerify** Changed by ERICKSON at 25-Sep-81 14:25:37 from LOGIC
Inserted a check for illegal prime-numbers, as in seq# or inc#a. These will only arise from user input. Also added an arg for use in error message.
- ProcessCommand** Changed by ERICKSON at 25-Sep-81 14:26:57 from <AFFIRM>CPATCH-122..5
'Type' command calls GenerateReflexiveRule, instead of recursing with 'declare', 'axiom'.

Removed 'echo', 'step' (not on command list, unimplemented). Added 'automatic', 'distinct', 'nochange'.
- RangeType** Changed by ERICKSON at 25-Sep-81 14:28:32 from NEW
New utility: gives the range for an extended name.
- ReadAtom** Changed by ERICKSON at 25-Sep-81 14:28:51 from <AFFIRM>CPATCH-122..5
UCaseParseAtoms no longer contains all words on ReserveWordList. This case-independent mapping is now done only for TRUE and FALSE; the UCASE property is used to map from lower to upper case for desired reserved words.

Net effect: True->TRUE but First is left unmolested.
- readReleaseFile** Changed by ERICKSON at 25-Sep-81 14:33:23 from REQUEST
Allows error #16 (end of file) to occur; otherwise, READFILE fails when under a DtvS (which catches EOF).
- reduceExpression** Changed by ERICKSON at 25-Sep-81 14:34:39 from <AFFIRM>CPATCH-122..5
Added production: nochangeSpec.
- RenameArgs** Changed by ERICKSON at 25-Sep-81 14:37:23 from NEW
Renames the variables in a function call.

ReplaceVarsWith Changed by ERICKSON at 25-Sep-81 14:37:36 from NEW
Given an expression, replaces all variables with something. Useful if you want to ignore variable names in comparisons. Doesn't handle Skolem functions.

RulesThatMightInteract

Changed by ERICKSON at 25-Sep-81 14:37:50 from REWRITERULE
Now appends RuleTypes:OtherRules when fetching candidates; used to act improperly (but was probably never exercised).

SchemaCaseNames

Changed by ERICKSON at 25-Sep-81 14:38:36 from TREE
Allows for schemas which don't contain Prop. This may never be needed, but I coded it up based on a mistaken schema.

Selectors

Changed by ERICKSON at 25-Sep-81 14:38:51 from NEW
Utility: computes the selector set of a type.

UnspecifiedLHSides

Changed by ERICKSON at 25-Sep-81 14:39:33 from NEW
For which (constructor-based) arguments has no specification (axiom, lemma, definition, automatic, etc) been supplied? Returns the most general left-hand sides; these, plus the specified ones, will cover all expressions except those more general than specified ones. (Eg, if $f(s \text{ apr } x)$ has been specified, then $f(s)$ will not appear in our result.)

unsupportedPascalFilter

Changed by ERICKSON at 25-Sep-81 14:40:32 from NEW
Filter function which warns user about productions which are in the grammar but not supported by Affirm.

MoreGeneralExprs

Changed by ERICKSON at 25-Sep-81 14:44:29 from <ERICKSON>AUTO..32
Ignore previous comment. Given an expression, computes those more-general parents which differ from child by the removal of a single function call. Also returns pointers and difference information, which may be used to regenerate child and siblings.

Rules

Changed by ERICKSON at 25-Sep-81 20:13:24 from REWRITERULE
Now calls LeftHandSides, rather than accessing the property directly.

NoteLeftHandSides

Changed by ERICKSON at 25-Sep-81 20:13:58 from REWRITERULE
Now calls LeftHandSides, rather than computing directly from the property.

CreatePatchFile

Changed by ERICKSON at 25-Sep-81 20:39:53 from <AFFIRM>CPATCH-123..1
Fixed call to USERNAME; that function also has to be advised to avoid an Interlisp bug. Yecch.

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13-Jul-81 18:05:18

Changes from Affirm version 122

These functions have changed:

- denote** Changed by ERICKSON at 25-Jun-81 16:56:56 from THEOREMPROVER
Bugfix: was never fully debugged. Still has the unfortunate behavior that user may be asked to declare a var, after which Affirm announces that the var isn't found in the CurrentPropn. Note that, if a denote var is renamed, then later clauses in that same command which use the var will refer to the old (not the renamed) one.
- ProcessCommand** Changed by ERICKSON at 25-Jun-81 16:57:32 from AFFIRMEXEC
Bugfix: wrong code for denote, extra param to invoke
- reduceExpression** Changed by ERICKSON at 25-Jun-81 16:57:40 from PARSERHELPER
Fixed up denoteSpec, denotePair
- InterfaceError** Changed by ERICKSON at 25-Jun-81 16:57:57 from SPECIFICATION
Bugfix: doesn't ask for interface if one exists (and thus just an interface error).
- MakeAccessExp** Changed by ERICKSON at 25-Jun-81 16:58:05 from PARSERHELPER
Removed code for :quantifier, an unsupported production. I wonder who wrote that code.
- ReadAtom** Changed by ERICKSON at 4-Jul-81 19:17:24 from PARSER
Bugfix. Now uses UCaseParseAtoms instead of ReserveWordList. Problem was that TRUE and FALSE became reserved, and so couldn't be input.
- InitializePart1** Changed by ERICKSON at 4-Jul-81 19:18:21 from UTILITY
Sets the new var UCaseParseAtoms. Doesn't set ReserveWordList any more (used to push MAX,MIN). See ReadAtom.

Changes from version 121

These functions have changed:

- ChooseASymbol** Changed by ERICKSON at 27-Feb-81 18:29:54 from LOGIC
Only "root" (unprimed) variables are entered on declaration lists; primed ones are derived from these at translation time. Also, declaration lists have short atoms as CAR, not atom\Interface.
- DWIMUSERFN** Changed by ERICKSON at 27-Feb-81 18:30:37 from UTILITY
- Removed calls to Dtps to ask for declares, since this is now done in Interface Error.
 - Removed CurrentContext check for 'interface uba's, since variable interfaces are not EVAL'd.
 - AskUserToDefine was always T, test removed.
- Thus, only handles Skolem functions for internal evaluation and uba's for new primed forms which user enters. (For example, user types "P(x#15)".)
- DeclareFun** Changed by ERICKSON at 27-Feb-81 18:31:25 from SPECIFICATION
New format of CurrentContext: CAR is a short atom, not atom\Interface. Also, calls CannedMessage for var-fn conflict.
- DeclareVariables** Changed by ERICKSON at 27-Feb-81 18:32:09 from LOGIC
No longer worries about declaring primes, since this is done automatically.
- GenNewSymbols** Changed by ERICKSON at 27-Feb-81 18:32:31 from VCGEN
New arguments to declareVar: 'call' tells nature of caller. Also use Translate instead of TypeOf.
- InitializeLoad** Changed by ERICKSON at 27-Feb-81 18:32:56 from SPECIFICATION
Converts old data type files to new declaration format. CAR is a short atom, not atom\Interface; primed vars don't occur.
- InterfaceError** Changed by ERICKSON at 27-Feb-81 18:34:35 from SPECIFICATION
No longer calls EVAL to depend on DWIMUSERFN to ask user to declare missing items. Does PleaseDeclare of variables and interfaces, and fixes up entered Skolem expressions. Commented out skeleton code.
- NewSymbolFrom** Changed by ERICKSON at 27-Feb-81 18:34:58 from LOGIC
No longer worries about declaring, since primed variables are only declared by virtue of the root.

- NotThisSymbol** Changed by ERICKSON at 27-Feb-81 18:35:13 from LOGIC
Only "root" (unprimed) variables are entered on declaration lists; primed ones are derived from these at translation time. Also, declaration lists have short atoms as CAR, not atom\Interface.
- PleaseDeclare** Changed by ERICKSON at 27-Feb-81 18:35:29 from NEW
New routine, which goes to a lower exec with a message for the user (please declare, give interface, or discard). Either returns with success or ERROR!s.
- PrimesToMatch** Changed by ERICKSON at 27-Feb-81 18:35:45 from NEW
New routine, which adds primes to a root variable to match some other var. Root has probably had its extension changed or \$\$ added. (For example. Translate and ChooseASymbol).
- RemoteTypeOf** Changed by ERICKSON at 27-Feb-81 18:36:09 from SPECIFICATION
Only "root" (unprimed) variables are entered on declaration lists; primed ones are derived from these at translation time. Also, declaration lists have short atoms as CAR, not atom\Interface.
- RenameVariables** Changed by ERICKSON at 27-Feb-81 18:37:16 from LOGIC
NewSymbolFrom no longer needs "dontDeclare" argument.
- Translate1** Changed by ERICKSON at 27-Feb-81 18:37:25 from SPECIFICATION
Since not called, not updated to reflect changes in declaration list format
- TranslateLitAtom** Changed by ERICKSON at 27-Feb-81 18:37:39 from SPECIFICATION
Only "root" (unprimed) variables are entered on declaration lists; primed ones are derived from these at translation time. Also, declaration lists have short atoms as CAR, not atom\Interface.
- TypeOf** Changed by ERICKSON at 27-Feb-81 18:37:48 from SPECIFICATION
Obsolete; NewSymbolFrom and DWIMUSERFN no longer call it, and GenNewSymbols calls TranslateLitAtom instead.
- adopt** Changed by ERICKSON at 27-Feb-81 18:37:57 from SPECIFICATION
New format of LocalDeclarations and CurrentContext: CAR is a short atom, not atom\Interface. Contain no primed vars.
- assocAllProgramUnits**
Changed by ERICKSON at 27-Feb-81 18:38:25 from PARSERHELPER
Removed reference to ProgramUnits, which was unbound and never set.

- declareVar** Changed by ERICKSON at 27-Feb-81 18:39:21 from SPECIFICATION
Only "root" (unprimed) variables are entered on declaration lists; primed ones are derived from these at translation time. Also, declaration lists have short atoms as CAR, not atom\Interface.
- Declarations of primed variables are ignored unless
- conflict with existing root, or
 - root is missing: will be declared
- Old arguments "internalCall" and "dontAskUser" consolidated into "call", which is one of *user*, *internal*, *vc*. This determines whether user is asked to correct his/her input (*user*) or if we abort with a message. Call CannedMessage for these notices, or for var-fun conflicts.
- discard** Changed by ERICKSON at 27-Feb-81 18:40:17 from SPECIFICATION
New format of LocalDeclarations and CurrentContext: CAR is a short atom, not atom\Interface.
- discardVariable** Changed by ERICKSON at 27-Feb-81 18:40:55 from SPECIFICATION
New format of LocalDeclarations and CurrentContext: CAR is a short atom, not atom\Interface.
- setupDeclarations** Changed by ERICKSON at 27-Feb-81 18:41:24 from PASCAL
New arguments to declareVar: 'call' tells nature of caller.
- AffirmSysoutInit** Changed by ERICKSON at 17-Mar-81 17:42:52 from UTILITY
Reminds the user if a notes file exists for this version. Resets CannedMessagesSeen.
- AutoMechExec1** Changed by ERICKSON at 17-Mar-81 17:43:11 from PROFILE
Changed to call Separate instead of Commatize.
- AutoMechSpec1** Changed by ERICKSON at 17-Mar-81 17:43:42 from PROFILE
Changed to call Separate instead of Commatize.
- AutoMechanism** Changed by ERICKSON at 17-Mar-81 17:43:55 from PROFILE
Changed to call Separate instead of Commatize.
- CheckIntroducedExpr**
Changed by ERICKSON at 17-Mar-81 17:44:09 from LOGIC
New argument: 'except'. Lists vars which are allowed to occur freely in the expression.
(Used for multiple denote.)
- Commatize** Changed by ERICKSON at 17-Mar-81 17:44:39 from UTILITY
Replaced by Separate, which is more general.

DefnRangeConvert

Changed by ERICKSON at 17-Mar-81 17:44:58 from NEW
Inverse of reduceExpression for defnRangePairs. Given a list of such reduced pairs, produces something printable (such as "f.g|1:3.-1|.|all|").

PrintNews

Changed by ERICKSON at 17-Mar-81 17:45:27 from AFFIRMEXEC
Announces if KnownBugs has been written since last session.

ReadAtom

Changed by ERICKSON at 17-Mar-81 17:46:01 from PARSER
Uses UCaseToList to recognize reserved words, so they can appear in any casing. For example, True used to cause a "please declare"!

Separate

Changed by ERICKSON at 17-Mar-81 17:46:18 from NEW
New function, which inserts separators (default commas) between elements of a list. May be given lists, and instructed to join them after the separation phase. Useful for building text like

f.g|a|.h|a:b.c|

Replaces Commatize.

SuppressAdvisedPrint?

Changed by ERICKSON at 17-Mar-81 17:46:47 from AFFIRMEXEC
Bugfix: if no 'needs', allows type to refer to itself without causing compilation printouts.

UCaseToList

Changed by ERICKSON at 17-Mar-81 17:47:01 from NEW
Upper-cases an atom and checks whether it is in a constant list. Lookaside with hash array (for speed and less garbage from generating atoms). Useful for recognizing reserved words when parsing.

baseName

Changed by ERICKSON at 17-Mar-81 17:47:18 from VCGEN
Calls AffirmError for the "unrecognized variable" message.

denote

Changed by ERICKSON at 17-Mar-81 17:47:37 from THEOREMPROVER
Now accepts multiple denote pairs, such as

denote f(x,y,z) by fx, g(fx,x) by gfz;

Note that later pairs can refer to earlier ones.

gripe

Changed by ERICKSON at 17-Mar-81 17:47:55 from AFFIRMEXEC
Cosmetic. Uses CONSTANT so some octal strings are readable

invoke

Changed by ERICKSON at 17-Mar-81 17:48:17 from THEOREMPROVER
Spelling-corrects operators, using the CurrentPropn. (Doesn't know ahead of time which functions really have invocable definitions.) If user responds '/' (none)' when asked to correct, the range-pair is ignored. Corrected command appears in proof tree.

Default range is now all rather than 1.

- next** Changed by ERICKSON at 17-Mar-81 17:48:35 from TREE
If there's more than one unproven ancestor, prints the choices, asks the user for approval, then goes to the first candidate.
- reduceExpression** Changed by ERICKSON at 17-Mar-81 17:48:54 from PARSERHELPER
Added entries for `machineSpec` and `machinePair`, changed `denoteSpec` to include `denotePair`, variable no longer can have qualifier.
- AffirmSave** Changed by ERICKSON at 19-Mar-81 16:25:13 from AFFIRMEXEC
Causes `MAKEFILE` to be `NEW` if no `FILEDATES` property. This saves printing of a message, and possibly reduces chances of LISP picking things from earlier versions.
- CompileRuleIntoLisp**
Changed by ERICKSON at 19-Mar-81 16:25:58 from REWRITERULE
Pushes `fn` onto `CHANGEDFNLIST`, but no longer undoably (just for safety).
- MakeFunction** Changed by ERICKSON at 19-Mar-81 16:26:31 from REWRITERULE
Marks function as changed (on `CHANGEDFNLIST`): fixes a bug where we used to copy old, axiomed interfaces from previous versions of type if new version has no rules for `fn`.
- SetupFile** Changed by ERICKSON at 19-Mar-81 16:27:22 from SPECIFICATION
Sets `FILEDATES` property to `NIL` when a type is declared, so old stuff (or old files) aren't used.
- discardVariable** Changed by ERICKSON at 19-Mar-81 16:28:11 from <ERICKSON>CPATCH-121..1
Sets discarded vars to `NOBIND`, so `Frees` will recognize them properly if they become interfaces.
- ProcessCommand** Changed by ERICKSON at 19-Mar-81 16:50:18 from AFFIRMEXEC
1. `declareVar` has different parameters describing nature of caller (for echoing and error reporting).
 2. `denote` takes a `DenoteSpec`, to allow multiple simultaneous denotes.
- CannedMessage** Changed by ERICKSON at 19-Mar-81 16:51:06 from `NEW`
New function which provides a centralized place for error messages. Is able to recognize whether a message has been given before in this session, so it can take a short form.
- Primary message selection and "first-time" recognition is based on 'atomicKey'; we may sometime extend this to allow multiple levels of identification. Callers can provide key-dependent auxiliary information, and can request that `ERROR!` be called rather than `return`.

genves

Changed by ERICKSON at 19-Mar-81 17:40:06 from PASCAL.

Bugfix: set up computes as a lemma without checking if it was TRUE. Note that absence of changed args may still cause some strange printing for verification root, since NIL prints as FUNCTION.

Printing:

- No longer prints the computes lemma -- who needs it?
- When 0 vcs, message is better.

PrettyPrintHistory

Changed by DTHOMPSON at 20-Mar-81 09:35:26 from FORMULAIO

Modified to handle wrap-around on event numbers correctly.

SeparateWithBlanks?

Changed by DTHOMPSON at 20-Mar-81 09:36:01 from NEW

New routine encapsulating decision whether to separate two tokens about to be output. If either token is a list, separate (with a blank); if both are atoms, then if both are longer than one character, separate; if either token is a one-character atom (and the other is an atom), AND the one-character atom is a break or separator character in the PascalReadTable, then DON'T separate; otherwise (whew!), separate. Now, is that clear?

printCommand?

Changed by DTHOMPSON at 20-Mar-81 09:38:50 from TREE

Modified to remove explicit code to decide whether to separate tokens about to be output with a blank. Now calls SeparateWithBlank?.

PrintIf

Changed by DTHOMPSON at 20-Mar-81 09:39:33 from INFIXPRINT

Modified to use printName to do output of IF, THEN, and ELSE keywords. Allows different things to happen depending on whether we're annotating or not.

printName

Changed by DTHOMPSON at 20-Mar-81 09:41:02 from AFFIRMEXEC

Modified to add new flags IfWord, ThenWord, and ElseWord. IfWord outputs the IF keyword in if-then-else expressions; the other two flags perform similarly. If we're not annotating, then all they do is output the keywords, exactly as was done (by PrintIf) before.

If we ARE annotating, then what gets sent to the terminal is different than what gets sent to the transcript. The terminal output is spaced so the IF, THEN and ELSE parts line up neatly, using (at least) three lines, with the THEN and ELSE parts lining up under the Boolean test of the IF part. The transcript output is SCRIBE code, which will effectively do the same lining up for a variable-width font. the IF part becomes "@if[]": THEN becomes "@then[]", and ELSE becomes "@else[]". These SCRIBE commands are macros defined in "ANNOA.LIB" files in people's directories.

readParams

Changed by DTHOMPSON at 20-Mar-81 09:45:58 from AFFIRMEXEC

Modified to remove just-plain-wrong code that tried to "read to end of line". The routine now reads to the stop character provided, and NO FURTHER. (That stop character is usually ";".)

SeparateWithBlanks?

Changed by DTHOMPSON at 31-Mar-81 13:55:23 from <AFFIRM>CPATCH-121..1

Updated to reflect changes somehow not in cpatch code. The check is: if both CURRENT and PREVIOUS are atoms, and if either one is a one-character break character, then no separation is needed between them (fn returns NIL); else separation is needed (fn returns T).

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Changes to version 120

These functions have changed:

- ClearNames** Changed by ERICKSON at 27-Oct-80 18:41:45 from TREE
Now accepts a list of names to clear. Used when discarding nodes.
- Closure** Changed by ERICKSON at 27-Oct-80 18:43:42 from NEW
New function: Given an alist, computes the transitive closure.
- DeleteNodes** Changed by ERICKSON at 27-Oct-80 18:44:00 from NEW
Destroys nodes, permitting their expressions and transformations to be reclaimed. Assumes that these node#s are not referred to by nodes outside the set to be discarded. (Node#s are never reused; this error will manifest as "node not found".)
- UPTO** Changed by ERICKSON at 27-Oct-80 18:44:35 from NEW
LISP utility; I got tired of the same text over and over. Collects elements of a list up to but not including a given element. EQ test.
- UnMakeTheorem** Changed by ERICKSON at 27-Oct-80 18:44:57 from TREE
An old function that had never been used before. Makes a theorem into just a regular node. Only guaranteed to work if the theorem isn't anyone's child, and is not used as a lemma.
- UsedBy** Changed by ERICKSON at 27-Oct-80 18:45:37 from TREE
Modified to allow for the unmaking of theorems. Now doesn't assume that previous users still exist. (Does assume that whoever unmakes a theorem makes sure that the parent of the nontheorem, if any, is properly recorded as using lemmas in the new subtree.)
- discard** Changed by ERICKSON at 27-Oct-80 18:45:58 from SPECIFICATION
New options:
- *theorems* gets rid of the specified theorems, making them into vanilla nodes.
 - *history* does a "forget"
 - *disconnected* reclaims any nodes which aren't part of the proof of theorems. Their names, expressions, and transformations go away.
- genvcs** Changed by ERICKSON at 30-Oct-80 16:42:44 from PASCAL
Now sets the vcs up as lemmas, rather than theorem children. Part of the change to AddChildren1. Of course, this means we no longer have arc labels (such as vc1:). Next behaves the same as before.

- Transform** Changed by ERICKSON at 30-Oct-80 16:43:47 from TREE
Had to commute some operations in order to have the AddChildren1 check for theorem descendants occur at the right time. Still notifies the user when disconnected stuff is reattached.
- Try** Changed by ERICKSON at 30-Oct-80 16:47:01 from TREE
Two changes with messages:
- try of something new no longer gives the "making a theorem" message.
 - try of a node which has a proof attempt but no parent theorem (and thus is part of a disconnected proof attempt) will point this situation out to the user.
- SetName** Changed by ERICKSON at 30-Oct-80 16:50:18 from TREE
Consistency check; causes an error if the node# isn't numeric.
- nodeExpression** Changed by ERICKSON at 30-Oct-80 16:50:41 from AFFIRMEXEC
Prevents the user from entering a node containing IH, as it's only meaningful within a proof, below an employ. Related to the new check in IH2OP. Of course, this will also prevent the user from trying a node by giving the expression if it contains IH, but I don't expect this to be a problem.
- Descendant?** Changed by ERICKSON at 30-Oct-80 16:51:21 from NEW
New function. Tells whether one node descends from another in the proof tree. Used in the new check in IH2OP.
- name** Changed by ERICKSON at 30-Oct-80 16:51:51 from TREE
Bugfix: puts the second argument thru the expression-to-node converter, so user can say "name x, P(a,b)" without disaster.
- AddChildren1** Changed by ERICKSON at 30-Oct-80 16:52:34 from TREE
Causes an error message if someone tries to add a theorem as a child. This is an attempt to avoid our proof tree "Descend to theorem" bug.
- IH\Boolean** Changed by ERICKSON at 30-Oct-80 16:53:03 from BOOLEAN
When IH is invoked, it now checks to ensure that it is a descendant of the employ to which it points. (This prevents IH from being invoked in a disconnected fragment; otherwise, the induction might have been changed, with bizarre results, as Stan discovered). It's no longer possible to prove cases of an induction as separate lemmas, if they reference IH; it must be invoked first.

- use** Changed by ERICKSON at 5-Nov-80 15:18:34 from THEOREMPROVER
If the user enters a lemma without supplying a name, Affirm will now automatically generate one. These names start with "L1".
- NewNodeName** Changed by ERICKSON at 5-Nov-80 15:18:24 from NEW
New function: Generates a new node-name. Like gensym, except:
- Names are shorter; for example, L5
 - Skips over any names which already exist. Unfortunately, doesn't check for spelling-corrector confusion (for example L5 vs I5).
- AcceptNewRules** Changed by DTHOMPSON at 13-Nov-80 11:05:33 from NEW
If this is AcceptNewRules, then this is a new function (and it must be Tuesday...)
- This new function oversees the reading and parsing and error checking of rules directly input to the Knuth-Bendix convergence process, after the user types "Accept Instead".
- AddRule** Changed by DTHOMPSON at 13-Nov-80 11:40:22 from NEW
Modified to use AcceptNewRules; also changed equation output formats to use "==" rather than "->".
- addRuleDirection** Changed by DTHOMPSON at 13-Nov-80 11:42:13 from LOGIC
Modified to not change "Instead" input key to "Accept", but to leave it alone. This key is returned to AddRule as CDR of return value.
- Assume** Changed by DTHOMPSON at 13-Nov-80 11:50:06 from TREE
Modified to return value T, saying "Yes, indeed something happened: check if auto mechanism can do something!"
- AutoApplicable** Changed by DTHOMPSON at 13-Nov-80 11:51:51 from PROFILE
Modified definition of applicability for AutoSufficient: now checks current command = "end", current type is defined, and member of known types.
- Part of the change to perform the auto-sufficient event BEFORE the type is closed, rather than just AFTER, as was previously

- AutoMechanism** Changed by DTHOMPSON at 13-Nov-80 11:53:31 from PROFILE
Modified to add event TheoremAssumed, applicable after an ASSUME command, which checks to see if any theorems have changed status, and performs the appropriate actions if so (such as printing their proofs, if they're now proved and AutoPrintProofs is armed).
- AutoMechSpec1** Changed by DTHOMPSON at 13-Nov-80 11:54:57 from PROFILE
Modified to remove AutoSufficient, as it's done directly from the END command processor in ProcessCommand.
- AutoMechTP2** Changed by DTHOMPSON at 13-Nov-80 11:56:11 from PROFILE
Modified to encapsulate part of its innards in a new routine AutoMechTP4.
- AutoMechTP2 repeatedly cycles thru a series of commands, applying each to the current proposition, until no commands change the result, or the current proposition is reduced to TRUE.
- The new routine, AutoMechTP4, handles the chore of what to do once the cycle finishes. (print proofs of any theorems now proved; find a new proposition to work on if necessary; etc.)
- AutoMechTP3** Changed by DTHOMPSON at 13-Nov-80 11:59:21 from NEW
New routine that handles the event after an APPLY command. Performs AutoSearch (if armed), and then calls AutoMechTP4 to handle the post-processing.
- AutoMechTP4** Changed by DTHOMPSON at 13-Nov-80 12:00:26 from NEW
New routine that handles the "post-processing" of the current proposition. If there are any theorems newly proved, print their proofs (if AutoPrintProofs is armed); and if the current proposition is TRUE, find some work to do (if AutoNext is armed).
- AutoPerform?** Changed by DTHOMPSON at 13-Nov-80 12:01:50 from PROFILE
Modified the Tell and Ask output strings to remove the "automatically" references -- seemed a bit stuffy.
- getElements** Changed by DTHOMPSON at 13-Nov-80 12:02:43 from AFFIRMEXEC
Added new object classes DiscardOptions, Disconnected, History.
- getViewableElements** Changed by DTHOMPSON at 13-Nov-80 12:03:07 from FORMULAIO
Added new object classes DiscardOptions, Disconnected, History. Also spelled out each current object class in the SELECTQ for completeness (used to be grouped at end).

- listDeclarations** Changed by DTHOMPSON at 13-Nov-80 12:04:14 from FORMULAIO
Modified to sort decls in each list. Output format changed slightly.
- listInfixOps** Changed by DTHOMPSON at 13-Nov-80 12:04:54 from FORMULAIO
Modified to sort interface names. Output format changed slightly.
- listInterfaces** Changed by DTHOMPSON at 13-Nov-80 12:05:18 from FORMULAIO
Output format changed to handle singletons and lists differently.
Singletoninterfaces appear on same line as command word; lists
start on next line. This makes the whole type listing look a bit
better.
- listNeeds** Changed by DTHOMPSON at 13-Nov-80 12:07:10 from FORMULAIO
Output format changed slightly.
- listOneRule** Changed by DTHOMPSON at 13-Nov-80 12:08:06 from FORMULAIO
Modified to reference global character-variables (LeftParenthesis,
etc.) instead of character literals.
- listRewriteRules** Changed by DTHOMPSON at 13-Nov-80 12:09:11 from FORMULAIO
Output format changed to handle singletons and lists differently.
Singleton rules appear on same line as command word; lists start on
next line. This makes the whole type listing look a bit better.
- PagesWarning** Changed by DTHOMPSON at 13-Nov-80 12:09:32 from UTILITY
Fixed bug, so that when pages left drops down below 10, not only
do you get a message, but if your gc-message was turned off, it's
turned on: you get to watch in living color as you go down in
flames.
- PerformAutoAppliedCommands**
Changed by DTHOMPSON at 13-Nov-80 12:10:46 from AFFIRMEXEC
Modified to handle ASSUME command, fixed to handle APPLY
command right.
- PrettyPrintHistory** Changed by DTHOMPSON at 13-Nov-80 12:11:23 from NEW
New routine that implements the 'print history' command, replacing
the 'e ??' command.
- print** Changed by DTHOMPSON at 13-Nov-80 12:11:59 from AFFIRMEXEC
Added 'history' option.
- PrintArgs** Changed by DTHOMPSON at 13-Nov-80 12:12:29 from FORMULAIO
I'm sure it was canged, nbut it couldn't have been too important a
change, because I don't remember what it was!

printCommand? Changed by DTHOMPSON at 13-Nov-80 12:13:04 from TREE
Now prints command pieces in a more readable format, scrunching blanks when possible (uses break char info from PascalReadTable).

PrintCurrentProposition Changed by DTHOMPSON at 13-Nov-80 12:15:27 from NEW
New routine that prints the current proposition if necessary. Called at the end of the Dtps command loop, if the command was a theorem prover command.

printHelper Changed by DTHOMPSON at 13-Nov-80 12:16:32 from FORMULAIO
Fixed bug in 'status' option of 'print' command.

PrintProof Changed by DTHOMPSON at 13-Nov-80 12:18:32 from TREE

printProofNode Changed by DTHOMPSON at 13-Nov-80 12:30:37 from TREE
Cleaned up the output format to scrunch blanks when it can.

ProcessCommand Changed by DTHOMPSON at 13-Nov-80 12:31:13 from AFFIRMEXEC
Modified END command processing to perform AutoSufficient event;

Added DISCARD options HISTORY, DISCONNECTED, THEOREMS.

ReadRules Changed by DTHOMPSON at 13-Nov-80 12:32:25 from NEW
New routine that reads and parses rules. Called by AcceptNewRules, in the Knuth-Bendix convergence process when the user answers "Accept Instead".

```

if B1
  then (if B2
    then X
    else Y)
  else X
    
```

RemoveCommonParts

Changed by DTHOMPSON at 13-Nov-80 12:33:41 from CEVAL
Two changes:

1. Modified to translate
to the reduced form

```

if (B1 and ~B2)
  then Y
  else X
    
```

rather than the previous form

```

if (B1 imp B2)
  then X
  else Y
    
```

2. Modified to translate

```

if B1
  then X
  else (if B2
    then Y
    else X)
    
```

to the reduced form

```

if (~B1 and B2)
  then Y
  else X
    
```

rather than the previous form

```

if (B2 imp B1)
  then X
  else Y
    
```

RemoveRule

Changed by DTHOMPSON at 13-Nov-80 13:14:55 from
REWRITERULE
Changed output format to use "==".

Report

Changed by DTHOMPSON at 13-Nov-80 13:16:06 from UTILITY
Modified reporting format to use equations, "==", read a bit better.

MakeNot Changed by DTHOMPSON at 17-Nov-80 15:53:07 from CEVAL
Modified to handle NOTting of IFs: $\sim(\text{If } a \text{ then } b \text{ else } c) == (\text{If } a \text{ then } \sim b \text{ else } \sim c)$.

use Changed by ERICKSON at 17-Nov-80 17:28:29 from
<ERICKSON>NAME..2
Lemmas are automatically named if user doesn't. Name is
"lemma" + <Integer> + "Of" + <name of theorem used in>. For
example, "lemma1ofthm1" or "lemma1Oflemma3Ofmain" (Ugh).

NewNodeName Changed by ERICKSON at 17-Nov-80 17:29:12 from
<ERICKSON>NAME..2
New functionality. Computes a new (not in KnownNames:Nodes)
name, using given prefix and suffix. Inserts integer, always
starting from 1. For example, lemma5Ofthm.

AffirmMakesys Changed by RBATES at 17-Nov-80 19:34:42 from UTILITY
Modify to run threw BEFOREMAKESYSFORMS and to make sure that
escape is indicated.

NoteFiles Changed by RBATES at 17-Nov-80 19:35:35 from REQUEST
Modify to run if building from scratch or from another MAKESYS.

Changes to version 113

These functions have changed:

AutoMechTP2 Changed by DTHOMPSON at 1-Oct-80 15:28:05 from PROFILE
Removed the implicit assumption of an invariant that isn't really always true: "When a theorem is finally proven, the CurrentPropn is TRUE." That ain't the case.

Now the AutoPrintProof event will fire regardless of CurrentPropn being TRUE or not. It depends only on the list of supposedly just-proven theorem names NewlyProved.

printCommand? Changed by ERICKSON at 1-Oct-80 18:44:04 from TREE
Now calls PrettyPrintCommand

Transform Changed by ERICKSON at 1-Oct-80 18:44:24 from TREE
The way proof tree nodes are shared is counter to most people's intuition. When unexpected sharing does happen, users can get quite confused.

I changed Transform to warn the user whenever a command generates children which already existed, have proof trees of their own, and weren't previously children of the node being transformed.

Equal Changed by ERICKSON at 2-Oct-80 17:31:45 from CEVAL
This function used to return FALSE when comparing two different expressions, if they had the IsConstant property. I removed this check. From what I can tell, it was unnecessary ever since we started the new equality mechanism. (For that matter, IsConstant seems to only be referenced by the unification mechanism, where I don't think it serves any purpose.) Except as a placeholder, I think Equal (known as EQOP) is only used by EvaluateRule.

No other changes.

MakeInterfaceRule Changed by RBATES at 6-Oct-80 09:30:05 from SPECIFICATION
Made the test for try to re-defined a interface the same here as in discard.

ProcessCommand Changed by RBATES at 6-Oct-80 09:31:25 from AFFIRMEXEC
Fixed a bug which only limited the number of parameters of put and let to one or two.

discard Changed by RBATES at 6-Oct-80 09:32:04 from SPECIFICATION
Changed the pexec called to do AffirmError when it detects a interface error.

Changes to version 112

These functions have changed:

ChooseASymbol	Changed by DTHOMPSON at 20-Aug-80 12:21:22 from LOGIC Changed PACK's and PACK*'s Involving explicit use of '\' Into ExtendName's.
ConvertOldType	Changed by DTHOMPSON at 20-Aug-80 12:28:48 from REWRITERULE Changed PACK's and PACK*'s Involving explicit use of '\' Into ExtendName's.
DeclareVariables	Changed by DTHOMPSON at 20-Aug-80 12:30:42 from LOGIC Changed PACK's and PACK*'s Involving explicit use of '\' Into ExtendName's.
EndInColon	Changed by DTHOMPSON at 20-Aug-80 12:31:27 from UTILITY Modified to use variable Colon rather than quoted character (Aggh).
ExtendName	Changed by DTHOMPSON at 20-Aug-80 12:48:51 from UTILITY Modified to use variable TypeSeparator rather than quoted character '\'
Extension	Changed by DTHOMPSON at 20-Aug-80 12:53:58 from UTILITY Modified to use variable TypeSeparator rather than explicitly reference quoted character '\'
Functions	Changed by DTHOMPSON at 20-Aug-80 12:56:04 from SPECIFICATION Changed PACK's and PACK*'s Involving explicit use of '\' Into ExtendName's.
GenNewSymbols	Changed by DTHOMPSON at 20-Aug-80 12:56:18 from VCGEN Changed PACK's and PACK*'s Involving explicit use of '\' Into ExtendName's.
genvcs	Changed by DTHOMPSON at 20-Aug-80 12:56:38 from PASCAL Changed references to explicitly quoted character ':' to variable Colon (Aggh, and Damnify Masterscope). Also changed "parent expression" of a sequence of vcs for a program to be "verification(<procedure-name>)", rather than the previous "verification(computes(...), result(...))".
Implementation	Changed by DTHOMPSON at 20-Aug-80 14:05:04 from SPECIFICATION Changed PACK's and PACK*'s Involving explicit use of '\' Into ExtendName's.

Changes to version 119

These functions have changed:

- AutoMechTP2** Changed by DTHOMPSON at 1-Oct-80 15:28:05 from PROFILE
Removed the implicit assumption of an invariant that isn't really always true: "When a theorem is finally proven, the CurrentPropn is TRUE." That ain't the case.
- Now the AutoPrintProof event will fire regardless of CurrentPropn being TRUE or not. It depends only on the list of supposedly just-proven theorem names NewlyProved.
- printCommand?** Changed by ERICKSON at 1-Oct-80 18:44:04 from TREE
Now calls PrettyPrintCommand
- Transform** Changed by ERICKSON at 1-Oct-80 18:44:24 from TREE
The way proof tree nodes are shared is counter to most people's intuition. When unexpected sharing does happen, users can get quite confused.
- I changed Transform to warn the user whenever a command generates children which already existed, have proof trees of their own, and weren't previously children of the node being transformed.
- Equal** Changed by ERICKSON at 2-Oct-80 17:31:45 from CEVAL
This function used to return FALSE when comparing two different expressions, if they had the IsConstant property. I removed this check. From what I can tell, it was unnecessary ever since we started the new equality mechanism. (For that matter, IsConstant seems to only be referenced by the unification mechanism, where I don't think it serves any purpose.) Except as a placeholder, I think Equal (known as EQOP) is only used by EvaluateRule.
- No other changes.
- MakeInterfaceRule** Changed by RBATES at 6-Oct-80 09:30:05 from SPECIFICATION
Made the test for try to re-defined a interface the same here as in discard.
- ProcessCommand** Changed by RBATES at 6-Oct-80 09:31:25 from AFFIRMEXEC
Fixed a bug which only limited the number of parameters of put and let to one or two.
- discard** Changed by RBATES at 6-Oct-80 09:32:04 from SPECIFICATION
Changed the pexec called to do AffirmError when it detects a interface error.

Changes to version 112

These functions have changed:

ChooseASymbol	Changed by DTHOMPSON at 20-Aug-80 12:21:22 from LOGIC Changed PACK's and PACK*'s involving explicit use of '\ ' Into ExtendName's.
ConvertOldType	Changed by DTHOMPSON at 20-Aug-80 12:28:48 from REWRITERULE Changed PACK's and PACK*'s involving explicit use of '\ ' Into ExtendName's.
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EndinColon	Changed by DTHOMPSON at 20-Aug-80 12:31:27 from UTILITY Modified to use variable Colon rather than quoted character (Aggh).
ExtendName	Changed by DTHOMPSON at 20-Aug-80 12:48:51 from UTILITY Modified to use variable TypeSeparator rather than quoted character '\ '.
Extension	Changed by DTHOMPSON at 20-Aug-80 12:53:58 from UTILITY Modified to use variable TypeSeparator rather than explicitly reference quoted character '\ '.
Functions	Changed by DTHOMPSON at 20-Aug-80 12:56:04 from SPECIFICATION Changed PACK's and PACK*'s involving explicit use of '\ ' Into ExtendName's.
GenNewSymbols	Changed by DTHOMPSON at 20-Aug-80 12:56:18 from VCGEN Changed PACK's and PACK*'s involving explicit use of '\ ' Into ExtendName's.
genvcs	Changed by DTHOMPSON at 20-Aug-80 12:56:38 from PASCAL Changed references to explicitly quoted character ':' to variable Colon (Aggh, and Damnify Masterscope). Also changed "parent expression" of a sequence of vcs for a program to be "verification(<procedure-name>)", rather than the previous "verification(computes(...), result(...))".
Implementation	Changed by DTHOMPSON at 20-Aug-80 14:05:04 from SPECIFICATION Changed PACK's and PACK*'s involving explicit use of '\ ' Into ExtendName's.

Macro Changed by DTHOMPSON at 20-Aug-80 14:05:13 from SPECIFICATION
Changed PACK's and PACK*'s involving explicit use of '\' into ExtendName's.

MakeExtension Changed by DTHOMPSON at 20-Aug-80 14:05:36 from UTILITY
Modified to use variable TypeSeparator rather than explicitly reference quoted character '\'

MakeInitialValueSymbols
Changed by DTHOMPSON at 20-Aug-80 14:10:03 from VCGEN
Modified to use variable SingleQuote rather than explicitly reference quoted character '"'

MakeInterfaceRule Changed by DTHOMPSON at 20-Aug-80 14:10:48 from SPECIFICATION
Changed PACK's and PACK*'s involving explicit use of '\' into ExtendName's.

New\$Symbol Changed by DTHOMPSON at 20-Aug-80 14:29:28 from LOGIC
Modified to use variable SingleQuote rather than explicitly reference quoted character '"'

NewSymbolFrom Changed by DTHOMPSON at 20-Aug-80 14:30:05 from LOGIC
Changed PACK's and PACK*'s involving explicit use of '\' into ExtendName's.

NotThisSymbol Changed by DTHOMPSON at 20-Aug-80 14:30:14 from LOGIC
Changed PACK's and PACK*'s involving explicit use of '\' into ExtendName's.

readString Changed by DTHOMPSON at 20-Aug-80 15:01:06 from AFFIRMEXEC
Modified to use variables DoubleQuote, PercentSign rather than reference quoted characters '"', '%'

SchemaCaseNames Changed by DTHOMPSON at 20-Aug-80 15:03:50 from TREE
Modified to use variable Colon rather than reference quoted character ':'.

setupDeclarations Changed by DTHOMPSON at 20-Aug-80 15:04:43 from PASCAL
Changed PACK's and PACK*'s involving explicit use of '\' into ExtendName's. Also modified to use variable SingleQuote rather than reference quoted character '"'

- Translate1** Changed by DTHOMPSON at 20-Aug-80 15:05:52 from SPECIFICATION
Changed PACK's and PACK*'s involving explicit use of '\ ' Into ExtendName's.
- TranslateLitAtom** Changed by DTHOMPSON at 20-Aug-80 15:06:02 from SPECIFICATION
Changed PACK's and PACK*'s involving explicit use of '\ ' Into ExtendName's.
- MakeInterfaceRule** Changed by ERICKSON at 28-Aug-80 18:00:56 from <DTHOMPSON>PX..3
Changed the redeclaration message to be less enticing.
- DeclareFun** Changed by ERICKSON at 28-Aug-80 18:01:19 from SPECIFICATION
Doesn't allow a function declaration if it conflicts with a variable in the current type.
- declareVar** Changed by ERICKSON at 28-Aug-80 18:01:36 from SPECIFICATION
Doesn't accept a variable declaration if it conflicts with an interface of the current type. (Such conflicts cause trouble with the EXPR defn.) I also removed a redundant call to Shorten; MakeExtension already shortens its arg. Also changed the redeclaration message to be less enticing.
- Shorten** Changed by ERICKSON at 28-Aug-80 18:01:57 from UTILITY
Optimization: checks for occurrence of \ before packing. Also, uses variable TypeSeparator instead of number 92.
- SchemaCaseNames** Changed by ERICKSON at 3-Sep-80 14:14:41 from <DTHOMPSON>PX..3
Permits a schema with only one case to omit the "cases" function.
- ChooseChainingsAndNarrowings**
Changed by RBATES at 5-Sep-80 10:06:10 from LOGIC
The function let now does the annotation which shows that choose was done. Returns the result of let (which is a (Descend (Transform trans))).
- TryChainingsAndNarrowings**
Changed by RBATES at 5-Sep-80 10:08:48 from LOGIC
The function let now does the annotation that search was done. Returns the result of let.
- choose** Changed by RBATES at 5-Sep-80 10:09:36 from THEOREMPROVER
Modified to return NIL or the result of the function let if something was done.

- discardInterface** Changed by RBATES at 5-Sep-80 10:10:18 from SPECIFICATION
Make sure the functions being discard aren't on any files.
- let** Changed by RBATES at 5-Sep-80 10:10:40 from THEOREMPROVER
Has a new argument which is the annotation to be placed on the node. Used by search and choose. Returns NIL or the result of the Descend.
- search** Changed by RBATES at 5-Sep-80 10:11:49 from THEOREMPROVER
Returns NIL or the result of the let.
- AffirmSave** Changed by RBATES at 8-Sep-80 10:03:12 from AFFIRMEXEC
When saving a file using the fast method (the default), don't bother the user with the question of whether or not to dump the masterscope database. The new <LISPUSERS>DATABASEFNS requires this change else we would ask when saving datatypes.
- NoteFiles** Changed by RBATES at 9-Sep-80 09:36:09 from REQUEST
Remember the full file name of WHEREIS.HASH to fix a problem with the new <LISPUSERS>WHEREIS.
- NoteFiles** Changed by RBATES at 9-Sep-80 14:28:25 from
<RBATES>CPAT111.6
Have to remember the DIRECTORY name in WHEREIS.HASH for the new WHEREISNOTICE.
- AutoApplicable** Changed by DTHOMPSON at 11-Sep-80 10:46:16 from PROFILE
Modified Auto Print Proof applicability test to check NewlyProved -- the list of theorem names just proved.
- AutoCommand** Changed by DTHOMPSON at 11-Sep-80 10:52:31 from PROFILE
Now returns the result of the command. Also handles auto freeze specially, to ask for a file name if one isn't supplied as a parameter to the QUIT command.
- AutoMechanism** Changed by DTHOMPSON at 11-Sep-80 11:04:50 from PROFILE
Added two new event categories: ProgramVerified, and TheoremProved. These perform the auto annotate function, and add the theorem name to the list NewlyProved, for the auto print proof function.
- Also encapsulated some of the event's code into separate routines. ProofCycleStep now calls AutoMechTP2. SessionCompletion calls AutoMechExec1. and SpecificationCommandCompletion calls AutoMechSpec1.

AutoMechExec1 Changed by DTHOMPSON at 11-Sep-80 11:09:09 from NEW
New routine encapsulating the SessionCompletion event. Performs auto Freeze, auto print proof theorems, auto compile, and auto save.

AutoMechSpec1 Changed by DTHOMPSON at 11-Sep-80 11:10:26 from NEW
New routine encapsulating the SpecificationCommandCompletion event. If applicable, performs the auto sufficient or auto infix commands.

AutoMechTP1 Changed by DTHOMPSON at 11-Sep-80 11:11:36 from NEW
New routine encapsulating the auto annotate command for the events ProgramVerified and TheoremProved.

AutoMechTP2 Changed by DTHOMPSON at 11-Sep-80 11:12:23 from NEW
New routine encapsulating the ProofCycleStep event.

Lots of activity here. The basic algorithm is as is was before: If applicable, perform the commands auto Invoke IH, auto cases, auto search, auto normint, auto replace. If any of these cause a transformation of the current proposition, re-perform any of the five that are now applicable. Repeat until no new transformations occur (and the proof tree builder is checking for circularity of transformations and breaking the loop if necessary).

After all transformations have been made, check to see if the current proposition is TRUE. If not, simply return; the user will come up with a new command. If the current proposition is TRUE, perform the auto-print proof command (the auto-annotate will have already happened as a result of the proof tree builder UpdateStatus routine invoking it separately), and then perform the auto-next command. If that returns a non-TRUE current proposition, then recursively apply the ProofCycleStep event to THAT.

Hopefully, it won't infinitely loop.

AutoPerform? Changed by DTHOMPSON at 11-Sep-80 11:18:28 from PROFILE
Modified to take third parameter, the form of which depends on the particular auto-command being checked. Passes the auxiliary parameter on to AutoApplicable for its use.

getProfileDefaultValue

Changed by DTHOMPSON at 11-Sep-80 11:20:59 from NEW
Modified to have correct definition. I did this for 1.11 but it got lost!

- Infix** Changed by DTHOMPSON at 11-Sep-80 11:21:36 from SPECIFICATION
Fixed subtle bug that wouldn't enter the operation name on the internal-to-external form mapper table, if the name was already a known system op.
- NoFreeVarsInRule** Changed by DTHOMPSON at 11-Sep-80 11:23:27 from SPECIFICATION
Modified to use Frees rather than FreeVars to calculate the free variables in the RHS of rules and schemas. This way, funny looking references to skolem functions are caught and reported.
- makeFileName** Changed by DTHOMPSON at 11-Sep-80 11:24:34 from AFFIRMEXEC
Modified to add the filename field BODY to the list it looks for. INTERLISP doesn't have BODY on its global list FILENAMEFIELDS!
- normint** Changed by DTHOMPSON at 11-Sep-80 11:25:38 from CEVAL
Modified to REALLY determine if it has had an effect, by comparing CurrentPropn with the result of using the Integer separations, and if that's different, then EVAL-ing the CurrentPropn to see if it simplifies to what it was before.

So NORMINT really returns an indication of its effect.
- printHelper** Changed by DTHOMPSON at 11-Sep-80 11:27:10 from FORMULAIO
Modified print IH option to remove duplicate references to the same definition.
- SeparationContradiction**
Changed by DTHOMPSON at 11-Sep-80 11:27:48 from CEVAL
Modified to use the profile entry ShowNormint (and its associated global flag ShowIntegerSimplification) to decide whether or not to print the junk it has been printing all along.
- SkipOverComments** Changed by DTHOMPSON at 11-Sep-80 11:28:38 from AFFIRMEXEC
Modified to use global var LeftCurlyBracket instead of quoted atom.
- skipPascalComment** Changed by DTHOMPSON at 11-Sep-80 11:29:22 from PASCAL
Modified to use global var RightCurlyBracket instead of quoted atom.
- UpdateStatus** Changed by DTHOMPSON at 11-Sep-80 11:30:09 from TREE
Modified to invoke the auto mechanism when the status of a theorem (or program) changes to proved (or varified).
- UserProfileDefault** Changed by DTHOMPSON at 11-Sep-80 11:31:10 from PROFILE
Modified to correct the body. It got eaten sometime between my creating it and the sys build of 1.11.

- AffirmExec** Changed by DTHOMPSON at 11-Sep-80 11:36:43 from AFFIRMEXEC
Modified to loop, calling InitializeCommandLoop and DTVS forever.
So if somehow we fall out of the command loop and get back to AffirmExec, it simply resets and re-enters the command loop.
- AffirmLoad** Changed by DTHOMPSON at 11-Sep-80 11:38:12 from AFFIRMEXEC
Modified call to getFileName to include descriptive string (see getFileName).
- Arc** Changed by DTHOMPSON at 11-Sep-80 11:38:46 from TREE
Modified to return value indicating its effect. Returns current propn or NIL.
- augment** Changed by DTHOMPSON at 11-Sep-80 11:39:32 from THEOREMPROVER
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- cases** Changed by DTHOMPSON at 11-Sep-80 11:42:45 from THEOREMPROVER
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)

Also prints the message "Cases had no effect" ONLY when the user explicitly invokes the command. There's no printout if there's no effect and the auto mechanism invoked the command function.
- CheckForType** Changed by DTHOMPSON at 11-Sep-80 11:44:34 from AFFIRMEXEC
Modified to take a list and pack it if necessary to come up with the atom type name.
- MinimalTypeSpec** Changed by DTHOMPSON at 11-Sep-80 11:45:17 from SPECIFICATION
Modified to supply third and fourth parameters to ProcessCommand. Third is the commandFile, here treated as Terminal; fourth is a flag indicating whether this call originated directly from user, or from internal source; here it's internal.

- complete** Changed by DTHOMPSON at 11-Sep-80 11:56:09 from THEOREMPROVER
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- Completer** Changed by DTHOMPSON at 11-Sep-80 13:12:58 from LOGIC
Modified call to Dtps to provide a commandFile parameter of Terminal (rather than T).
- declareVar** Changed by DTHOMPSON at 11-Sep-80 13:15:01 from <ERICKSON>VARS..5
Modified call to Dtps to provide a commandFile parameter of Terminal (rather than T).
- getFileNameFromDirectory** Changed by DTHOMPSON at 11-Sep-80 13:19:29 from FORMULAIO
Modified all calls to getFileName to provide descriptive string (see getFileName).
- GetParameters** Changed by DTHOMPSON at 11-Sep-80 13:24:10 from AFFIRMEXEC
Modified call to ReadRestOfLine to provide indication to use default read table (see ReadRestOfLine).
- IgnoreExcess** Changed by DTHOMPSON at 11-Sep-80 13:25:40 from NEW
New routine that prints a message if its parameter is non-NIL. Most commands will end up calling this routine with any part of the command line they don't intend to look at. This way, the user is explicitly notified that we're ignoring excess parameters.
- InitializeCommandLoop** Changed by DTHOMPSON at 11-Sep-80 13:27:21 from AFFIRMEXEC
Modified to set global var oldinputfile to Terminal, and to Close all open input files (just in case).

- Invoke** Changed by DTHOMPSON at 11-Sep-80 13:28:17 from THEOREMPROVER
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- loadNeededFiles** Changed by DTHOMPSON at 11-Sep-80 13:28:29 from FORMULAIO
Modified call to getFileName so whole process is invisible to user.
- LoadUserInitializationFile**
Changed by DTHOMPSON at 11-Sep-80 15:21:31 from AFFIRMEXEC
Modified call to getFileName so whole process is invisible to user (it always was, but the calling sequence of getFileName changed).
- MakeInterfaceRule** Changed by DTHOMPSON at 11-Sep-80 15:45:19 from <ERICKSON>VARS..5
Modified call to Dtps to provide a commandFile parameter of Terminal (rather than T).
- MissingECommand?** Changed by DTHOMPSON at 11-Sep-80 15:57:09 from AFFIRMEXEC
Modified to refer to Terminal rather than T when referring to a command file.
- next** Changed by DTHOMPSON at 11-Sep-80 15:57:42 from TREE
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- ObjectClassOfParameters**
Changed by DTHOMPSON at 11-Sep-80 15:58:03 from AFFIRMEXEC
Added a third parameter, internalCall, that's simply passed on to GetArgumentsFromList. The idea is to distinguish between user-typed and internally-generated input, where the user's input needs more checking and filtering (such as packing, removing commas, spelling correction, etc.).
- PagesLeft** Changed by DTHOMPSON at 11-Sep-80 16:15:56 from NEW
New routine that performs the necessary magickal incantations to determine how many free pages there left.

PagesWarning Changed by DTHOMPSON at 11-Sep-80 16:16:26 from NEW
New routine that prints out a cute warning to the user when the number of free pages left is less than this routine's parameter. A non-FIXP parameter (in particular, NIL) uses a default threshold value of 10.

A call to this routine has been imbedded in DtvS, around the command loop. So before each command, the system checks the number of free pages and perhaps warns the user.

PerformAutoAppliedCommands

Changed by DTHOMPSON at 11-Sep-80 16:18:36 from NEW
New routine that encapsulates the auto mech invocation at the end of the command loop. In 1.11, this was part of SetEventCompletionFlag. It's now it's own.

PrintEnd Changed by DTHOMPSON at 11-Sep-80 16:19:54 from AFFIRMEXEC
Modified to reference Terminal when referring to a command file, rather than T.

readp Changed by DTHOMPSON at 11-Sep-80 16:20:42 from PASCAL
Modified call to getFileName to provide descriptive string.

readParams Changed by DTHOMPSON at 11-Sep-80 16:21:30 from AFFIRMEXEC
Modified to use global var DoubleQuote rather than quoted atom.

ReadRestOfLine Changed by DTHOMPSON at 11-Sep-80 16:22:57 from AFFIRMEXEC
Added second parameter, a read table to use. If T, use default, PascalReadTable. Else use whatever's supplied.

Also modified to eat comments in the list of atoms read. (Uses new routine EatComments that handles mis-matches.)

ReadSpecialCommandParameters

Changed by DTHOMPSON at 11-Sep-80 16:24:51 from AFFIRMEXEC
Modified calls to ReadRstOfLine to supply second parameter, most of the time T for default read table PascalReadTable.

The fix, redo, and undb commands now also use ReadRestOfLine, whereas before they uses RATOMS with a different read table than PascalReadTable.

The profile command, which does its own input separately from ReadRestOfLine, also eats comments separately.

redo Changed by DTHOMPSON at 11-Sep-80 16:27:36 from AFFIRMEXEC
Modified to return value of command that was re-done or fixed.

- replaceCommand** Changed by DTHOMPSON at 11-Sep-80 17:23:23 from THEOREMPROVER
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- Also won't print "Replace had no effect" if invoked under auto mech.
- Restart** Changed by DTHOMPSON at 11-Sep-80 17:24:02 from TREE
Modified to return value of the restart, so routines calling this one can pass it on back.
- saveUserProfile?** Changed by DTHOMPSON at 11-Sep-80 17:24:54 from PROFILE
Modified call to getFileName to provide descriptive string.
- SetEventCompletionFlag**
Changed by DTHOMPSON at 11-Sep-80 17:25:34 from AFFIRMEXEC
Modified to remove all the auto mech stuff. It all went into its own brand spanking new function.
- split** Changed by DTHOMPSON at 11-Sep-80 17:26:18 from THEOREMPROVER
Modified to check current proposition for list form. Won't split an atom (not into nukes here!).
- Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- suppose** Changed by DTHOMPSON at 11-Sep-80 17:27:13 from THEOREMPROVER
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)

- TopLevel?** Changed by DTHOMPSON at 11-Sep-80 17:27:31 from NEW
New routine that encapsulates check for top level exec. Turns out the check is real simple: LowerExec=0. Used to be more complicated, when we first introduced UsingTed stuff, but Ray managed to collapse differences into DTVS, and avoid the hassles at this level.
- Transform** Changed by DTHOMPSON at 11-Sep-80 17:28:38 from TREE
Modified printout form.
- Try** Changed by DTHOMPSON at 11-Sep-80 17:30:50 from TREE
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- The change to return an indication of effect caused more than superficial changes. Some code was re-structured.
- TypeFile** Changed by DTHOMPSON at 11-Sep-80 17:32:01 from UTILITY
Modified call to getFileName to provide descriptive string.
- UndertakeProof** Changed by DTHOMPSON at 11-Sep-80 17:34:23 from TREE
Modified to return CurrentPropn or the result of a Normalize call, so routines calling this one can pass it on back.
- use** Changed by DTHOMPSON at 11-Sep-80 17:35:07 from THEOREMPROVER
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- UserProfileEnquiry** Changed by DTHOMPSON at 11-Sep-80 17:35:50 from PROFILE
Modified call to getFileName to provide descriptive string.

- ProcessCommand** Changed by DTHOMPSON at 11-Sep-80 17:36:28 from AFFIRMEXEC
Added fourth parameter, in indication whether this call originates from internal sources or directly from the user. The parameter filtering routines use the info.
- Modified to call ProcessCommand (recursively) with explicit third and fourth parameters, the fourth being internal.
- Modified to call getFileName with descriptive string.
- Modified most command parameter filters in huge SELECTQ to explicitly tell user when excess parameters are being ignored.
- Modified calls to GetArgumentsFromList to take internal indication flag.
- Made invoke command parameter processing a little smarter; it now does spelling correction for 'first' or 'all'.
- AffirmCompile** Changed by DTHOMPSON at 11-Sep-80 17:40:28 from AFFIRMEXEC
Modified to supply third and fourth parameters to ProcessCommand. Third is the commandFile, here treated as Terminal; fourth is a flag indicating whether this call originated directly from user, or from internal source; here it's internal.
- ReadCommandFile** Changed by DTHOMPSON at 11-Sep-80 17:40:54 from AFFIRMEXEC
Modified to supply third and fourth parameters to ProcessCommand. Third is the commandFile, here treated as Terminal; fourth is a flag indicating whether this call originated directly from user, or from internal source; here it's internal.
- DetermineObjectClass**
Changed by DTHOMPSON at 11-Sep-80 17:41:52 from AFFIRMEXEC
Modified to call routine getElements instead of getViewableElements, when defaulting the possible object classes to search through.
- Dtvs** Changed by DTHOMPSON at 11-Sep-80 17:43:09 from AFFIRMEXEC
Modified to call PagesWarning at beginning of command loop, and PerformAutoAppliedCommands at the end. Saves the result of the ProcessCommand call to pass to PerformAutoAppliedCommands which takes advantage of no-change commands to NOT invoke the auto mech (an optimization).

- DTVS** Changed by DTHOMPSON at 11-Sep-80 17:44:56 from AFFIRMEXEC
Modified call to getFileName to provide descriptive string. Also modified to use Terminal rather than T when referring to command file.
- DWIMUSERFN** Changed by DTHOMPSON at 11-Sep-80 17:45:34 from UTILITY
Modified call to DtvS to provide a commandFile parameter of Terminal (rather than T).
- EatComments** Changed by DTHOMPSON at 11-Sep-80 17:45:47 from NEW
New routine that simply removes sublists from its list parameter, where the sublist starts with '{' and ends with '}'. Lists starting with '{' but not ending with '}' are found and the command is aborted.
- Thus this function eats comments in a list.
- employ** Changed by DTHOMPSON at 11-Sep-80 17:47:11 from THEOREMPROVER
Modified to return an indication of its effect. Returns either NIL (no effect) or the result of descending to the proof tree node created by the transformation associated with this command. (In other words, the new CurrentPropn. The result of the descend may be NIL if the transformation is circular, something not known in the command function. But most of the time, will simply be the CurrentPropn.)
- ErrorInFile** Changed by DTHOMPSON at 11-Sep-80 17:47:39 from AFFIRMEXEC
Modified call to DtvS to provide a commandFile parameter of Terminal (rather than T).
- GenericInterface** Changed by DTHOMPSON at 11-Sep-80 17:47:54 from SPECIFICATION
Modified call to DtvS to provide a commandFile parameter of Terminal (rather than T).
- GetArgumentsFromList** Changed by DTHOMPSON at 11-Sep-80 17:48:09 from AFFIRMEXEC
Modified to take third parameter, internalCall. Indicates whether filtering is really necessary. If internalCall is non-NIL, then the list of atoms to be broken into parameters is ALREADY broken. Simple returns the list. Otherwise, does as before: look for sublists separated by commas; each is a parameter.
- New second parameter indicates whether parameters delineated by the routine should be PACKed into one atom or stay lists. Lists of length one are automatically atomized.

getFileName

Changed by DTHOMPSON at 11-Sep-80 17:51:21 from AFFIRMEXEC
Modified semantics of third parameter. Used to be DONTaskUser.
Default was NIL, which meant it was OK to ask. Explicit non-NIL
value meant DONT ask user.

Now it is named askUser. NIL means don't ask. non-NIL is assumed
to be a DESCRIPTIVE STRING to be printed out when prompting for a
file name from the user. A value of T means ask, but use whatever
the customary default for a prompt is.

Also modified calls to TTYINFILE, TYOUTFILE, to supply the
descriptive string to them.

ProcessCommand

Changed by RBATES at 16-Sep-80 16:26:24 from
<AFFIRM>CPATCH-111..1
Changed the function to call the new invoke command.

down

Changed by DTHOMPSON at 17-Sep-80 13:28:06 from TREE
Modified to return NIL so the auto mechanism won't be invoked.
Thus the relative movement commands place you at a certain node,
and leave you there.

exec

Changed by DTHOMPSON at 17-Sep-80 13:29:07 from UTILITY
Added carriage return after message.

up

Changed by DTHOMPSON at 17-Sep-80 13:29:32 from TREE
Modified to return NIL so the auto mechanism won't be invoked.
Thus the relative movement commands place you at a certain node,
and leave you there.

FindEqvs

Changed by DTHOMPSON at 17-Sep-80 13:30:34 from CEVAL
Modified to be smarter about quantified expressions, and avoid
attempting to find equivalences in the given and find lists.

Also modified to use IfExpression records, rather than directly build
the structure itself.

RemoveCommonParts

Changed by DTHOMPSON at 17-Sep-80 13:32:40 from CEVAL
Modified to perform compaction based on then and else branch
forms REPEATEDLY, instead of just once.

Also modified to use IfExpression records, rather than directly build
the structure itself.

Removelfs Changed by DTHOMPSON at 17-Sep-80 13:33:44 from CEVAL
Moved part of the test whether to produce the new form or the old form into this routine, simplifying code in Removelfs1, which is recursively invoked a whole bunch of times.

Removelfs1 Changed by DTHOMPSON at 17-Sep-80 13:35:03 from CEVAL
Modified to use IfExpression records rather than directly build an if-expression structure itself.

RemovelfsCommonSubExps
Changed by DTHOMPSON at 17-Sep-80 13:35:35 from CEVAL
Modified to check for an if-expression at startup.

RemovelfsFromIf Changed by DTHOMPSON at 17-Sep-80 13:35:58 from CEVAL
Modified to use IfExpression records.

Now checks to ensure it has an if-expression in the first place.

Now performs single level transformations into ANDs, OR, etc, BEFORE looking for multi-level stuff involving common then and else branches of lower if-expressions. I really think this is not right in the long run, but this represents a step back to CEVAL..22 from .23, where strange transformation occurred. I'm still figuring it out...

ProcessCommand Changed by ERICKSON at 17-Sep-80 17:20:32 from
<RBATES>INVOKE..22
Added "denote", "swap".

augment Changed by ERICKSON at 18-Sep-80 13:01:55 from
<AFFIRM>CPATCH-111..1
Now calls CheckIntroducedExpr, SkolemizeProperly.

complete Changed by ERICKSON at 18-Sep-80 13:02:50 from
<AFFIRM>CPATCH-111..1
Now calls SkolemizeProperly, not Instance.

replaceCommand Changed by ERICKSON at 18-Sep-80 13:03:52 from
<AFFIRM>CPATCH-111..1
Now calls SkolemizeProperly, not Instance.

denote Changed by ERICKSON at 18-Sep-80 13:04:15 from NEW
New command: given an expression and a variable, adds the hypothesis "expr = var" to the current proposition. Declares the variable if need be, renames it to avoid conflicts with existing vars. (Var must not occur in expr.) Substitutes var for expr in body. Uses new utilities: CheckIntroducedExpr, SkolemizeProperly.

suppose Changed by ERICKSON at 18-Sep-80 13:05:02 from
<AFFIRM>CPATCH-111..1
Now calls CheckIntroducedExpr to ensure that any free variables in
the supposition are already bound in the theorem. Thus one can't
say "suppose P(x)" where x is unknown. Also calls
SkolemizeProperly instead of Instance.

InstanceQ Changed by ERICKSON at 18-Sep-80 13:05:20 from LOGIC
Replaced by SkolemizeProperly.

search Changed by ERICKSON at 18-Sep-80 13:05:40 from
<AFFIRM>CPATCH-111..1
Now calls SkolemizeProperly, not Instance.

Instance? Changed by ERICKSON at 18-Sep-80 13:05:49 from LOGIC
Replaced by SkolemizeProperly.

choose Changed by ERICKSON at 18-Sep-80 13:06:06 from
<AFFIRM>CPATCH-111..1
Now calls SkolemizeProperly, not Instance.

AddHypothesis Changed by ERICKSON at 18-Sep-80 13:06:12 from NEW
Utility: adds an hypothesis to a quantified expression.

TranslateLitAtom Changed by ERICKSON at 18-Sep-80 13:06:37 from
<AFFIRM>CPATCH-111..1
New argument: "varProbe" causes NIL to be returned if the atom
Isn't declared as a variable (bypassing interfacing and DWIM).

SkolemizeProperly Changed by ERICKSON at 18-Sep-80 13:07:00 from NEW
A new utility, a central place for everybody who used to call
Instance to make sure Skolem functions are in good form. Useful
before things like complete/search, or where normalization
problems may arise due to mismatches. May be given a
Qexpression, or a fragment and surrounding Qex.

CheckForQexpression Changed by ERICKSON at 18-Sep-80 13:07:27 from LOGIC
Added argument, which causes error message to be "internal".

Normalize Changed by ERICKSON at 18-Sep-80 13:07:59 from
THEOREMPROVER
Now calls SkolemizeProperly, not Instance.

CheckIntroducedExpr

Changed by ERICKSON at 18-Sep-80 13:08:10 from NEW

When the user supplies an expression to be added to a proposition (as in augment, suppose, or denote) it must be checked that its free variables properly match those bound in the propn. This function performs the check.

EqualInvoke

Changed by RBATES at 19-Sep-80 09:24:31 from NEW

This function is called by invoke to test if a pattern is equal to a given expression. The test apply to see if something is equal or not is MatchOp.

FindAllDefs

Changed by RBATES at 19-Sep-80 09:26:06 from NEW

Called by invoke to gather up any instances of a expression that pass the "test". The test is done by APPLY'ing one of the arguments.

MatchArg

Changed by RBATES at 19-Sep-80 09:27:52 from NEW

Called by MatchOp to test if a short form of expression is equal to a long form. Has to worry about SkolemFunctions.

MatchOp

Changed by RBATES at 19-Sep-80 09:29:23 from NEW

Used to test if a short form of expression is equal to a long form. Has to worry about SkolemFunctions. Uses MatchArg.

PickDefs

Changed by RBATES at 19-Sep-80 09:30:04 from NEW

Takes a Range,Expr and ErrorExpr. Range is one range specification which is used to pick out what parts of Expr the user wants. Calls AffirmError if the rangeSpec does not make sence (i.e. out of range, didn't pick any thing). Assumes that Expr is a LIST.

PickPostiveNumber

Changed by RBATES at 19-Sep-80 09:33:22 from NEW

Used by PickDefs to convert one range into a postive number. ErrorExpr is only printed on errors.

ProcessCommand

Changed by RBATES at 19-Sep-80 09:34:11 from
<ERICKSON>DENOTE..16

Modified to call the parser instead of GetArgumentFromList. Uses the parser production of interfaceList.

- Invoke** Changed by RBATES at 19-Sep-80 09:35:33 from <AFFIRM>CPATCH-111..1
This is the new version of invoke which solves many of the problems of the old invoke. The algorithm is explained in the code. The problems this function solves are many. The user can give a range spec to tell invoke which instances he/she wants invoke. RangeSpec is either postive number, negative number or number : number (which is delimited by |). This allows the user to count from either end. The user can give either the name or expression to be invoke (i.e. F(3,4)|5:-2| would for the fifth F(3,4) to F(3,4) which was second from the end). This version of invoke notices when a invoking a operator had no effect. This version only invokes operators that the users sees (fixes a problem where if the user invoke one operator which happen to expand to another operator, which the user happen to want to be invoke too, the possibly was that the hidden operator was invoked.)
- InvokeP** Changed by RBATES at 19-Sep-80 09:44:31 from NEW
Used by Invoke and FindAllDefs to see if operator name is the head of the current expression.
- reduceExpression** Changed by RBATES at 19-Sep-80 09:45:07 from PARSEHELPER
Modified to handle the new parser production of InterfaceList and rangedInterfaceList.
- ProcessCommand** Changed by RBATES at 19-Sep-80 11:04:15 from <RBATES>INVOKE..43
Modify put and let so that there parameters can be seperated by "," or "and" instead of just "and".
- Plural** Changed by DTHOMPSON at 19-Sep-80 12:36:09 from AFFIRMEXEC
Modified to handle plural matching for the atoms 'is and 'are. Thus (Plural 'is '(a b c))='are and (Plural 'are '(1))='is.
- Commatize** Changed by DTHOMPSON at 19-Sep-80 17:01:07 from NEW
A new function that takes a list and returns a new list of the same objects sepatated by commas: (a b c) == (a , b , c).
- replaceCommand** Changed by ERICKSON at 22-Sep-80 10:05:36 from <AFFIRM>CPATCH-111..4
Now calls SkolemizeProperly, not Instance.
- MapExpr** Changed by ERICKSON at 22-Sep-80 10:06:04 from NEW
New utility: applies functional argument to all subexpressions. Third argument requests that atomic subexprs be skipped.

swapCommand

Changed by ERICKSON at 22-Sep-80 10:08:08 from NEW
New command: causes equalities to be reversed. Target follows same syntax as Invoke. Equality may be specified by ordinal number and/or one of the arguments to equality. No default target. Swaps all targeted equalities.

AffirmBreak

Changed by ERICKSON at 22-Sep-80 15:37:41 from UTILITY
Bugfix: used to allow naive users to be dropped into a break. Now tests NOT(BRKTYPE) instead of (incorrectly) NOT(BRKCOMS).

ALL\Boolean

Changed by ERICKSON at 22-Sep-80 15:40:03 from BOOLEAN
Prevents the user from binding an interface. (Functions with no arguments used to slip through here.)

SOME\Boolean

Changed by ERICKSON at 22-Sep-80 15:40:29 from BOOLEAN
Prevents the user from binding an interface. (Functions with no arguments used to slip through here.)

Changes to version 110

These functions have changed:

GenericInterface Changed by RBATES at 19-Aug-80 08:54:01 from SPECIFICATION
Fixed a problem that happend with the ASKUSER call. The ASKUSER call evaluated the return clause an extra time, this didn't cause any problems unless the user was employing Induction, then it would blow up.

RecoverTranscript Changed by RBATES at 19-Aug-80 08:55:47 from UTILITY
What the routine work more by doing a CLOSEF?.

AutoCommand Changed by DTHOMPSON at 19-Aug-80 08:57:55 from PROFILE
Modified to return an indication of whether or not the command was applied: T if so, NIL if not.

This is not really accurate enough in the long run. What we really need is a report from the command routine that the command had an effect, didn't have one, or caused an error, etc. Particularly in the theorem prover section of the auto mechanism, when one command "fires", if it resulted in a change to the Current Proposition, then other auto-commands may be applicable. The best we can do right now is see whether that first command fired or not, but (without saving a copy of the current proposition) we can't tell if it actually had an effect. This could conceivably lead to infinite looping of auto commands, unless we're REAL careful (which we are, right now, but who says what'll happen in 6 months when we all forget all this nonsense?).

AutoMechanism

Changed by DTHOMPSON at 19-Aug-80 09:05:52 from PROFILE
Modified to add a "LemmaApplication" event, which after an apply command checks to see if the search command is applicable.

Also modified to cycle through applicable theorem prover commands after a proof cycle step. A list of ActionsToBePerformed is initialized to the actions (cases; normint; invoke all IH; search; replace;). Then entries are removed from the list, one by one, and run through the auto mechanism. If the command is applicable (right conditions for the particular command: see *AFFIRM* memo-32-TB for those conditions), and if it's armed (profile entry on), then the command is performed. If the command had any effect, then more commands may be added to the end of the list to be performed, as follows:

cases;	normint; search; replace;
normint;	search; replace;
invoke all IH;	cases; normint; invoke all IH; search; replace
search;	(none)
replace;	cases; normint; search;

Presently, the test for effect of a command is only approximated. If the command was performed, it is assumed to have had an effect. (Until command routines return an explicit indication.)

UserProfileDefault

Changed by DTHOMPSON at 19-Aug-80 09:46:12 from PROFILE
Modified to call the right functions (bug).

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- This also has a side-effect on how interface error messages involving if-then-else's are printed. It used to attempt to print the if-expressions as binary infix operators (!), eating the third parameter (the else branch). Now it will print them as prefix functions IFELSE(test, then, else).
- OperatorPrecedence** Changed by DTHOMPSON at 19-Aug-80 17:11:19 from INFIXPRINT
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Deposits and Withdrawals

Deposits made by the following persons and for the following purposes:

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Deposits and Withdrawals

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Changes to version 110

These functions have changed:

GenericInterface Changed by RBATES at 19-Aug-80 08:54:01 from SPECIFICATION
Fixed a problem that happend with the ASKUSER call. The ASKUSER call evaluated the return clause an extra time, this didn't cause any problems unless the user was employing Induction, then it would blow up.

RecoverTranscript Changed by RBATES at 19-Aug-80 08:55:47 from UTILITY
What the routine work more by doing a CLOSEF?.

AutoCommand Changed by DTHOMPSON at 19-Aug-80 08:57:55 from PROFILE
Modified to return an indication of whether or not the command was applied: T if so, NIL if not.

This is not really accurate enough in the long run. What we really need is a report from the command routine that the command had an effect, didn't have one, or caused an error, etc. Particularly in the theorem prover section of the auto mechanism, when one command "fires", if it resulted in a change to the Current Proposition, then other auto-commands may be applicable. The best we can do right now is see whether that first command fired or not, but (without saving a copy of the current proposition) we can't tell if it actually had an effect. This could conceivably lead to infinite looping of auto commands, unless we're REAL careful (which we are, right now, but who says what'll happen in 6 months when we all forget all this nonsense?).

AutoMechanism

Changed by DTHOMPSON at 19-Aug-80 09:05:52 from PROFILE
Modified to add a "LemmaApplication" event, which after an apply command checks to see if the search command is applicable.

Also modified to cycle through applicable theorem prover commands after a proof cycle step. A list of ActionsToBePerformed is initialized to the actions (cases; normint; invoke all IH; search; replace;). Then entries are removed from the list, one by one, and run through the auto mechanism. If the command is applicable (right conditions for the particular command: see *AFFIRM* memo-32-TB for those conditions), and if it's armed (profile entry on), then the command is performed. If the command had any effect, then more commands may be added to the end of the list to be performed, as follows:

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 version 110 3
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 version 110 2
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Changes to version 109

These functions have changed:

- AffirmError** Changed by DTHOMPSON at 23-Jul-80 17:13:32 from UTILITY
Modified to be less "parental" about the messages, and more informal; deleted the prefix "User Error:".
- CloseAnnotation** Changed by DTHOMPSON at 23-Jul-80 17:17:30 from AFFIRMEXEC
Modified to close annotation with "]*@", which closes the previous "@UCmd" environment, and also forces a line break.
- FindSubexpressions** Changed by DTHOMPSON at 23-Jul-80 17:19:21 from NEW
New routine that finds the subexpressions of the second parameter that have as their main operator the first parameter.
- listNeeds** Changed by DTHOMPSON at 23-Jul-80 17:20:55 from FORMULAIO
Modified to avoid spacing in needs ... type printing. Absolutely TRIVIAL change.
- printAnnotation?** Changed by DTHOMPSON at 23-Jul-80 17:22:37 from TREE
Modified to provide the annotation as an *AFFIRM* command if the second parameter is non-NIL. In addition, the second parameter is the node name, if it's non-NIL, non-T.
- printName** Changed by DTHOMPSON at 23-Jul-80 17:29:11 from AFFIRMEXEC
Modified to use variables instead of strings/quoted characters; added "FixedCommand" section that will font the echoing of an edited command to the transcript only; modified to use new scribe environments UCmd and SCmd, replacing the old Cmd.
- printPropn** Changed by DTHOMPSON at 23-Jul-80 17:31:35 from TREE
Modified to list the propn in an *AFFIRM* command format, with annotation and status.
- prinHelper** Changed by DTHOMPSON at 23-Jul-80 17:33:31 from FORMULAIO
Modified IH to work with new multiple-IH stuff; STATUS to use new sentence format; USES to use scribe tabbing if we're annotating.
- PrintProof** Changed by DTHOMPSON at 23-Jul-80 17:35:36 from TREE
Modified to list theorem in an *AFFIRM* command format.
- UpdateStatus** Changed by DTHOMPSON at 23-Jul-80 17:38:32 from TREE
Modified some output statements to make them sentences. TRIVIAL change.

- UserEdit** Changed by DTHOMPSON at 23-Jul-80 17:40:09 from AFFIRMEXEC
Modified to use printName, with the FixedCommand option, rather than pretty print the command to the transcript itself. printName will now do it, and worry about fonting if we're annotating.
- AddCommandToHistory** Changed by RBATES at 23-Jul-80 19:20:48 from AFFIRMEXEC
Modified for the TED interface.
- AddParametersToHistory** Changed by RBATES at 23-Jul-80 19:21:43 from AFFIRMEXEC
Modified for the TED interface. Pretty prints the command if we are using TED.
- AffirmExec** Changed by RBATES at 23-Jul-80 19:22:15 from AFFIRMEXEC
Modified for the TED interface. Passes a parameter to DTVS indicating that the DTVS is the top one.
- AffirmMakesys** Changed by RBATES at 23-Jul-80 19:24:38 from UTILITY
Move the setting of AFFIRMMAKESYSFILE to ReInitializeAffirm, so that the AFFIRMMAKESYSFILE is known in BASE-AFFIRM.EXE.
- CleanupRequest** Changed by RBATES at 23-Jul-80 19:25:44 from REQUEST
Does a INFILEP on the file name.
- DTV** Changed by RBATES at 23-Jul-80 19:26:11 from AFFIRMEXEC
Modified for the TED interface. This function did what the function UsingTed did. If one has UsingTed on (a new profile entry) then Affirm looks for the file in TEDFILE (currently AFFIRM.COMMAND) and executes one command and stops. If the system can't find the file and UsingTed is on the system prints a message and becomes a "normal" system.
- DeclareFun** Changed by RBATES at 23-Jul-80 19:29:57 from SPECIFICATION
Passes the parameter DontPrint to MakeInterfaceRule.
- GenericInterface** Changed by RBATES at 23-Jul-80 19:31:31 from SPECIFICATION
The ASKUSER call GenericInterface issues when it can't tell the difference between two or more interfaces has been modify so that the user can go into a lower exec by typing pause.
- MakeInterfaceRule** Changed by RBATES at 23-Jul-80 19:33:04 from SPECIFICATION
The system goes into an lower exec if the system has mutiply defined iñterfaces, so that the user can discard the interface and go on (requires the new discard command).

- NextAffirmVersion** Changed by RBATES at 23-Jul-80 19:34:45 from UTILITY
Sets the variable AFFIRMMAKESYSFILE (which used to get set in AffirmMakesys) so that BASE-AFFIRM.EXE has the name set.
- PrintPrompt** Changed by RBATES at 23-Jul-80 19:37:00 from AFFIRMEXEC
Modified for TED.
- ProcessCommand** Changed by RBATES at 23-Jul-80 19:37:20 from AFFIRMEXEC
Did 3 things, one wrote a new discard command (see the function discard), modified freeze to return to DTVS if the commandFile isn't the Terminal and we are coming back from a sysin (this is so that TED interface can do a SYSOUT), and wrote a new command thaw. Thaw takes a file and does a sysin. The reason that you need this command is that when you use TED you can't change where TED is picking up the AFFIRM from, so you need to do thaw to recover a freeze.
- Transform** Changed by RBATES at 23-Jul-80 19:47:25 from TREE
Modify to print a message if the Circular test comes back true and a new parameter is supplied. The old method was to issue an error message. The commands normint and replace currently call this function this way, since it isn't good enough to check to see if CurrentProp is equal to what you are going to send to Transform, since you father might be equal to what you are sending to Transform.
- declareVar** Changed by RBATES at 23-Jul-80 19:52:54 from SPECIFICATION
Modified to call lower exec if there are mutiple defined variables, so the user can discard the variable.
- discard** Changed by RBATES at 23-Jul-80 19:53:48 from SPECIFICATION
One can discard variables, LHS and interfaces now. The new syntax is discard {variable | LHS | interface} expressionSequence. The old syntax of discard expression is no longer accepted.
- discardInterface** Changed by RBATES at 23-Jul-80 19:55:48 from SPECIFICATION
Modfied to do /PUTD to NIL for the approiote functions.
- findDefinition** Changed by RBATES at 23-Jul-80 19:56:40 from REQUEST
Fix a problem that happend when you had EXPRP defintion. It used to do PUTPROP instead of redefining the function.
- getFileName** Changed by RBATES at 23-Jul-80 19:57:41 from AFFIRMEXEC
Returns T is firstTry is T.
- normint** Changed by RBATES at 23-Jul-80 19:58:09 from CEVAL
Calls the new Transform.

printChanged1 Changed by RBATES at 23-Jul-80 19:58:33 from REQUEST Remembers which file it has open (instead of assuming that the file was of the proper format).

redo Changed by RBATES at 23-Jul-80 19:59:40 from AFFIRMEXEC Removed the extra call to PrettyPrintCommand.

replaceCommand Changed by RBATES at 23-Jul-80 20:00:09 from THEOREMPROVER Calls the new Transform.

setupDeclarations Changed by RBATES at 23-Jul-80 20:00:28 from PASCAL Calls DeclareFun with DontPrint=T so that it always redefines the interface, the old function did GETD check to skip over the call. This didn't work if the user changed the number of parameters on a procedure.

AddParametersToHistory

Changed by RBATES at 4-Aug-80 16:21:44 from <AFFIRM>CPATCH-108..1

When using the Ted Interface echoing of lisp commands will be done by .PPV. Some of the problems with the Ted interface are that you can't read a command that requires EVALQT (i.e. E DATE()) won't work when reading from a file, while E (DATE) will). Also the prompt comes out twice on the transcript.

DTVS Changed by RBATES at 4-Aug-80 16:25:38 from <AFFIRM>CPATCH-108..1
DTVS puts on ERRORTYPELIST the information that is required to read commands from files. It is the function that make sure that the oldinput file is restored instead of ProcessCommand.

EvalFormWithoutDribble

Changed by RBATES at 4-Aug-80 16:27:47 from NEW
This function has a compiler macro so its only reason it exist is to avoid calls to MACROTRAN.

PrintEnd Changed by RBATES at 4-Aug-80 16:29:44 from NIL
Instead of doing a member test of '(e ImplicitE) It now looks at LispCommands (which is set to the same thing).

PrintPrompt Changed by RBATES at 4-Aug-80 16:30:46 from <AFFIRM>CPATCH-108..1
If this function finds out that there is no DRIBBLE file It calls RecoverTranscript to make sure that the user has been warned.

ProcessCommand Changed by RBATES at 4-Aug-80 16:31:49 from
<AFFIRM>CPATCH-108..1
Moved some of the things that the read command does to DTVS.

Qexpression Changed by RBATES at 4-Aug-80 16:32:25 from LOGIC
Fixed a problem with using the variable v by renaming v to be v% .

RecoverTranscript Changed by RBATES at 4-Aug-80 16:33:15 from NEW
If this function finds out that there is no transcript and there was one previously it tries to recover the transcript. The way it knows that a transcript file is around is by the variable TRANSCRIPTFILE. If TRANSCRIPTFILE is GiveMessage or the error recover fails then a message is given a user that he lost his transcript file.

transcript Changed by RBATES at 4-Aug-80 16:43:55 from AFFIRMEXEC
Sets the global variable TRANSCRIPTFILE for the new function RecoverTranscript.

Descend Changed by ERICKSON at 4-Aug-80 16:52:44 from TREE
When given NIL as an argument (which happens when all children are TRUE), descends to and prints "TRUE". This fixes Susan's complaint about normint, complete, replace not giving proper notice when they yield TRUE.

SuppressAdvisedPrint?
Changed by ERICKSON at 4-Aug-80 16:54:48 from AFFIRMEXEC
Removed a spurious call to USEREXEC. Oops.

FindEqvs Changed by DTHOMPSON at 4-Aug-80 17:12:47 from NEW
New routine that looks for if-expressions in its argument that are equivalences in hiding.

MakeAnd Changed by DTHOMPSON at 4-Aug-80 17:21:56 from CEVAL
Modified to use Expression record.

MakeEqv Changed by DTHOMPSON at 4-Aug-80 17:22:41 from CEVAL
Modified to use Expression record.

MakeImplies Changed by DTHOMPSON at 4-Aug-80 17:23:29 from CEVAL
Modified to use Expression record.

MakeNot Changed by DTHOMPSON at 4-Aug-80 17:24:11 from CEVAL
Modified to use Expression record.

MakeOr Changed by DTHOMPSON at 4-Aug-80 17:24:50 from CEVAL
Modified to use Expression record.

RemoveCommonParts

Changed by DTHOMPSON at 4-Aug-80 17:25:06 from CEVAL
Modified to use Expression record, and to perform common sub exp removal BEFORE looking for equal then/else subparts. (Will find more commonality this way).

Removelfs

Changed by DTHOMPSON at 4-Aug-80 17:26:39 from CEVAL
Modified to perform common sub-expression removal BEFORE looking for equivalences.

Removelfs1

Changed by DTHOMPSON at 4-Aug-80 17:28:15 from NEW
New routine that is old Removelfs. The new one simply calls this one, and then looks for equivalences.

RemovelfsCommonSubExps

Changed by DTHOMPSON at 4-Aug-80 17:28:40 from CEVAL
Simplified control flow; hopefully didn't muck up the behavior.
Replaced PROGS with PROGNs or implicit PROGNs, etc.

RemovelfsFromIf

Changed by DTHOMPSON at 4-Aug-80 17:29:32 from CEVAL
Modified to perform common sub-expression removal BEFORE performing transformations into AND, OR, etc.

RemovelfsHelper

Changed by DTHOMPSON at 4-Aug-80 17:30:45 from CEVAL
Modified to use Expression record.

PrintPrefixFunction

Changed by DTHOMPSON at 4-Aug-80 17:40:36 from INFIXPRINT
Modified to handle case of second parameter to IH2OP not being a FIXP. Just passes it out to the printer.

Try

Changed by ERICKSON at 6-Aug-80 12:23:14 from TREE
Bugfix. "try" of a node above us in the tree used to not normalize or print. Now calls Normalize after Ascend.

AddCommandToHistory

Changed by RBATES at 6-Aug-80 12:31:25 from
<AFFIRM>CPATCH-108..1
Now checking the variable PRINTCOMMAND to tell if we should add the command to the history if we are reading from a file. Used by the TED interface.

AffirmError

Changed by RBATES at 6-Aug-80 12:33:24 from
<AFFIRM>CPATCH-108..1
Changed ~~HELPDEPTH~~ to HELPFLAG. This seems to stop Affirm from going into a break.

AffirmInitAfterMakesys

Changed by RBATES at 6-Aug-80 12:34:18 from UTILITY
Changed the ADVISE around EVALQT so if we are using TED, AFFIRM will print a message and stop, so that TED will wake up.

AffirmNews

Changed by RBATES at 6-Aug-80 12:35:23 from AFFIRMEXEC
Changed HELPDEPTH to HELPFLAG.

AffirmSave

Changed by RBATES at 6-Aug-80 12:36:24 from AFFIRMEXEC
Changed HELPDEPTH to HELPFLAG.

CloseAndOpenDribble

Changed by RBATES at 6-Aug-80 12:37:03 from UTILITY
Calls RecoverTranscript if the function can not re-open the transcript.

FtpFile

Changed by RBATES at 6-Aug-80 12:37:53 from UTILITY
Changed HELPDEPTH to HELPFLAG.

GtjfnHelp

Changed by RBATES at 6-Aug-80 12:38:16 from UTILITY
Changed HELPDEPTH to HELPFLAG.

OpenAnnotation

Changed by RBATES at 6-Aug-80 12:38:34 from AFFIRMEXEC
Uses PRINTCOMMAND to indicate wheter or not to "open" the annotation of the command.

ReadUserProfileFile

Changed by RBATES at 6-Aug-80 12:39:22 from PROFILE
Changed HELPDEPTH to HELPFLAG.

exec

Changed by RBATES at 6-Aug-80 12:39:47 from UTILITY
Changed HELPDEPTH to HELPFLAG.

Auto2Abort

Changed by DTHOMPSON at 8-Aug-80 10:28:58 from NEW
New routine that processes user aborts during the running of the auto mechanism. Currently will abort the auto mechanism, undoing its effects, and then quietly return to the command level of AFFIRM; does NOT undo the command the user typed that spawned the autocommands.

AutoApplicable

Changed by DTHOMPSON at 8-Aug-80 10:30:26 from NEW
New routine that decides if a particular auto command is applicable. Huge case statement that, based on the particular command, checks the current environment.

- AutoCommand** Changed by DTHOMPSON at 8-Aug-80 10:32:12 from NEW
New routine that, given a command to possibly be performed "automatically", first checks whether it's ARMED, then whether it's APPLICABLE, and then performs the command.
- AutoMechanism** Changed by DTHOMPSON at 8-Aug-80 10:33:09 from NEW
New routine that acts as central control for the auto mechanism. Called in various places throughout AFFIRM, mainly at the end of the command loop; takes an event descriptor as its parameter, and based on the descriptor, calls AutoCommand umpteen times to attempt to perform a variety of commands dependent on the event. Current event descriptors include SessionCompletion, ProofCycleStep, SpecificationCommandCompletion, etc.
- AutoNotYet** Changed by DTHOMPSON at 8-Aug-80 10:35:58 from NEW
New routine that will hopefully have a short lifetime. It prints out a message saying a particular auto command isn't really implemented. So when I put in all the flags in the profile mechanism, I can try to get them all to actually DO something; but if it turns out some need more hassle than others, I can always set the entry to call AutoNotYet as a side effect of being set. AutoNotYet warns the user "You can't do that!", and RESETS the flag to Off!
- Current profile entries referring to this function are AutoFix, AutoUndo, AutoSave, AutoCompile, and AutoInfix.
- AutoPerform?** Changed by DTHOMPSON at 8-Aug-80 10:38:58 from NEW
New routine that asks whether an auto command is armed and applicable. armed == UserProfile is On, Tell, or Ask and user says Yes; applicable == current state says yes.
- Dtvs** Changed by DTHOMPSON at 8-Aug-80 10:40:18 from AFFIRMEXEC
Modified to set global flag CurrentCommand to command name. Also modified to call SetEventCompletionFlag and ProcessCommandAbort with new calling sequences.
- ErrorInFile** Changed by DTHOMPSON at 8-Aug-80 10:41:16 from NEW
New routine that controls calling of lower exec upon error detection when reading from file.
- Normalize** Changed by DTHOMPSON at 8-Aug-80 10:41:47 from THEOREMPROVER
Modified to NOT print out the CurrentPropn after completing its simplification duties. This because any auto commands may change the current prop, and we don't want it printed each time, only at the end.

PopTypeStack Changed by DTHOMPSON at 8-Aug-80 10:42:45 from AFFIRMEXEC
Modified to return the type that's getting popped. This so the auto
sufficient command has the name to work with.

ProcessCommandAbort
Changed by DTHOMPSON at 8-Aug-80 10:43:22 from AFFIRMEXEC
Modified to call auto mechanism with event CommandAbort, for
autoFix feature. Also handles calling of ErrorInFile, which will start
up a lower exec for user handling of errors from files.
ProcessCommandAbort first ensures we were indeed reading from a
file (which must be semi-smart to avoid calling AFFIRM.COMMAND a
file if UsingTed is in effect).

redo Changed by DTHOMPSON at 8-Aug-80 10:45:23 from
<AFFIRM>CPATCH-108..1
Modified to reset global CurrentCommand to the actual command
about to be performed, so that the redo mechanism is transparent
to the auto mechanism.

SetEventCompletionFlag
Changed by DTHOMPSON at 8-Aug-80 10:46:37 from AFFIRMEXEC
Modified to call AutoMechanism (this routine is the end of the
command loop), providing an event descriptor based on the
category of the command just processed (Executive, Specification,
Theorem Prover, etc). Also, if the command just processed was a
theorem prover command, and not one of those that doesn't print
out the current prop (such as APPLY), the current prop is listed.

UserProfileDefault Changed by DTHOMPSON at 8-Aug-80 10:48:26 from NEW
New routine that should have been in the profile mechanism for a
long time. A New Entry point. There are now three:
UserProfile[Get], UserProfileSet, and UserProfileDefault.

split Changed by DTHOMPSON at 8-Aug-80 11:14:23 from
THEOREMPROVER
Modified to perform a Normalize of the EXTERNAL form of the
current prop, BEFORE attempting splitting. This forces various
internal forms having the same external form to all map to the SAME
internal form, so the split will always do what the user wants.

This makes SPLIT a little more expensive to use. SUPPOSE is
better.

ProcessCommand Changed by DTHOMPSON at 8-Aug-80 11:16:06 from
<RBATES>2CPAT108..14

Modified to add a few little things for the auto mechanism. The
END command remembers the type just left, so the auto sufficient
command has the name to work with. The QUIT command calls the
auto mechanism with event descriptor SessionCompleted.

Changes to version 104

These files have changed:

PROFILE Changed by ERICKSON at 11-May-80 23:50:09 from
<AFFIRM>PROFILE.;12
Made 'UserProfileSet' an entry to the block. It still shouldn't be
called from outside code; this is only for undoability.

These functions have changed:

CircularTransformP Changed by ERICKSON at 23-Apr-80 22:53:37 from TREE
Returns more information for circularities involving nontheorems.
(Danny had a confusing example where a series of lemmas did
nothing.)

SetName Changed by ERICKSON at 23-Apr-80 22:54:03 from TREE
Doesn't complain when setting a name to its current value

printAnnotation? Changed by ERICKSON at 23-Apr-80 22:54:30 from TREE
Output is less vertical (moved LH margin over)

printCommand? Changed by ERICKSON at 23-Apr-80 22:54:53 from TREE
Calls PrettyPrint instead of Infix\Print3, so ifs are removed. (No
more "suppose if P(x) then FALSE else TRUE", etc!)

ProcessCommand Changed by ERICKSON at 24-Apr-80 16:05:47 from AFFIRMEXEC
For the '@' command, no longer asks whether you want to annotate.
Instead, allows the annotation to be empty (in which case it is left
out).

EditTheorem Changed by ERICKSON at 24-Apr-80 16:08:14 from TEDIT
Removed unused parameter, call to Annotate. (Always done in
ProcessCommand)

ReadSpecialCommandParameters

Changed by ERICKSON at 24-Apr-80 16:08:26 from AFFIRMEXEC
If CommandLineBuffering is off, outputs the right Scribe stuff for
the command to work.

ParityP Changed by ERICKSON at 27-Apr-80 22:50:33 from TEDIT
Fixed typo.

Loaded? Changed by ERICKSON at 27-Apr-80 22:51:34 from FORMULAIO
For 'file', can now be given a full file name. If version number is
given, insists that be current. (Not tested much)

AffirmCompile Changed by ERICKSON at 27-Apr-80 22:53:09 from AFFIRMEXEC
Binds 'SuppressCompilerMsgs' (see SuppressAdvisedPrint?)

SuppressAdvisedPrint?

Changed by ERICKSON at 27-Apr-80 23:01:57 from NEW
Used, along with advice on Print calls from the compiler, to prevent silly messages like "(dwimifying apr\Seq)" and "(apr\Seq\Interface (s i) (Integer Seq))". Activated if the global 'SuppressCompilerMsgs' is true; in this case, the former message is always prevented.

The latter type of message is suppressed if the list of global variables referenced by the function is a subset of the type names which it can legally use, as denoted by the list SuppressCompilerMsgs. (If set to T, we compute this value: if the function's Extension has a :Needs, we take UNION(Needs, the type itself, Predefined types). As a result, suppression won't happen if we're compiling a type which isn't loaded.)

UserProfilePut Changed by ERICKSON at 12-May-80 00:03:12 from PROFILE
Made undoable, commented. (included in changes to PROFILE)

SimplifyRule Changed by ERICKSON at 23-Jun-80 18:55:10 from REWRITERULE
Now calls EvaluateRule, which simplifies RHS and LHS separately. Fixes a problem where Knuth-Bendix prematurely discarded rules because of equality axioms. (See EvaluateRule.)

AddRule Changed by ERICKSON at 23-Jun-80 18:55:32 from LOGIC

- "Accept instead" now pushes the current critical pair onto the end of Unchecked, so it will eventually be reduced/examined.
- Made undoable with respect to Unchecked, BadEquations. Not the only one which needs such changes (since CLISP declarations don't work)!
- Calls EvaluateRule to simplify new rules, instead of EVAL.

EvaluateRule

Changed by ERICKSON at 23-Jun-80 18:55:55 from NEW
Computes whether (Equal (EVAL rule:RHS) (EVAL rule:LHS)), rather than using the equality operator of the type, which might cause Completer to prematurely discard a rule during Knuth-Bendix. This happens because equality axioms could bridge the equal sign when simplifying the equation. The rule might simplify to TRUE, but still be needed for confluence. KB might therefore not terminate.

Is careful to return the same equality operator as was given.

employ

Changed by ERICKSON at 23-Jun-80 18:56:36 from THEOREMPROVER

Multiple inductions are now permitted; IH's from different inductions are distinguished. There are two forms: IH\Induction (IH1OP) appears in schemas, and takes the usual single argument. When employ is called, this is converted into IH\BUILTIN (IH2OP) which takes two args: the usual, and the node number of the place induction was done. When invoked, it looks up the node, finds the induction variable, and computes the proper expression.

Prop and IH are therefore handcoded; employ binds global variables, instead of calling CompileRuleIntoLisp.

ComputeInductionExpression

Changed by ERICKSON at 23-Jun-80 18:57:02 from NEW
Used to calculate the induction expressions for Prop and IH, by performing the substitutions that a rewrite rule would use. Given a normalized expression, formal parameter, and actual parameter.

Prop\Induction

Changed by ERICKSON at 23-Jun-80 18:57:21 from INDUCTION PROPOP; expands out, using ComputeInductionExpression, when global flag ExpandInductors is on. Uses global IndVar, CurrentPropn.

IH\Induction

Changed by ERICKSON at 23-Jun-80 18:57:38 from INDUCTION IH1OP, the form of IH which appears in schemas. Expands to IH2OP, using global IntTarget, when the flag ExpandInductors is on.

IH\BUILTIN

Changed by ERICKSON at 23-Jun-80 18:57:58 from NEW
IH2OP, the form of IH which occurs in theorems. When invoked, uses ComputeInductionExpression. Appears in axioms of type BUILTIN as a defn $IH(v,i) == IH(v,i)$; this is just a placeholder so we can call Report. Really is handcoded.

SchemaCaseNames

Changed by ERICKSON at 23-Jun-80 18:59:21 from TREE
Finds the LAST occurrence of Prop, rather than the first. Useful for schemas of the form "Prop implies Prop"

- CompileRuleIntoLisp** Changed by ERICKSON at 23-Jun-80 18:59:41 from REWRITERULE
Bugfix: last clause in ORR command to editor was wrong. Changed MBD to -1 MBD.
- ActualExprAt** Changed by ERICKSON at 23-Jun-80 19:00:02 from NEW
Given a node id, returns the normalized expression at that node. Since theorems are unnormalized, we need this kludgey function to perform the calculations.
- AffirmBreak** Changed by ERICKSON at 23-Jun-80 19:08:09 from UTILITY
Allows an explicitly-requested break to go through (distinguished by BRKCOMS=NIL). Still gives a backtrace from errors in the "e" command; this should be changed when we unify syntax.
- SetName** Changed by ERICKSON at 23-Jun-80 19:08:33 from <ERICKSON>PRINT.;3
If a name is reset to its current value, doesn't print a message. (Often happens when generating vcs for modified programs.)
- CallEditor** Changed by RBATES at 24-Jun-80 15:14:42 from UTILITY
Calls the compiler macro EvalFormWithoutDribble to close and open the dribble file.
- CallSubsys** Changed by RBATES at 24-Jun-80 15:16:27 from UTILITY
Fixed a problem with "terminal page" not being restored after the Subsys was called.
- CloseAndOpenDribble** Changed by RBATES at 24-Jun-80 15:17:39 from NEW
Called by the compiler macro EvalFormWithoutDribble. Used to close and open the dribble files. Prints what dribble file is being closed. If it can't reopen the dribble the file it will call transcript to open a new dribble file.
- CloseDribble** Changed by RBATES at 24-Jun-80 15:19:54 from UTILITY
This funtion has the wrong name. It is used by the review command. Changed to call EvalFormWithoutDribble.
- DprintoutMacro** Changed by RBATES at 24-Jun-80 15:20:45 from UTILITY
Now calls RESETLST and RESETSAVE instead of 2 RESETFORMS. Should fix a problem with having the dribble file not being reset back.

EvalFormWithOutDribbleMacro

Changed by RBATES at 24-Jun-80 15:22:28 from NEW

This implements the compiler macro EvalFormWithOutDribble. The macro takes any number of arguments which are evaluated while the dribble file is closed. The macro prints a message if the dribble file was closed.

GtJfnHelp

Changed by RBATES at 24-Jun-80 15:27:49 from UTILITY

Fixed a problem that caused "terminal page" not being restored.

gripe

Changed by RBATES at 24-Jun-80 15:28:57 from AFFIRMEXEC

Modified to call EvalFormWithOutDribble.

transcript

Changed by RBATES at 24-Jun-80 15:29:52 from AFFIRMEXEC

Removed code that tried to open different versions of a given file. Also modified the function to open the dribble file in "thawed" mode so one can look at dribble file while it's still open.

addFact

Changed by RBATES at 24-Jun-80 15:33:30 from CEVAL

If the fact is false then AddFact sets Assumed and Denied to the same thing so that addIntegerFacts can return this contradiction.

addIntegerFacts

Changed by RBATES at 24-Jun-80 15:35:06 from CEVAL

No change.

trueBranch

Changed by RBATES at 24-Jun-80 15:35:34 from CEVAL

Fixed a problem with Assumed and Denied being set to the wrong thing.

normint

Changed by ERICKSON at 24-Jun-80 18:18:24 from NEW

Dave Musser's command to invoke the separation-theory integer box. Changed to fit the proof tree norms, check to make sure we have a Qexpression, print message if no change.

UseSeparations

Changed by ERICKSON at 24-Jun-80 18:20:21 from NEW

Used to assume it was given an IFOP. Now checks, passes thru if not.

EvaluateRule

Changed by ERICKSON at 24-Jun-80 18:22:59 from <ERICKSON>KB.6

Bugfix: If the equality operator is EQVOP, allows it to expand. (Otherwise, IfThenElses won't simplify properly with each other.)

Axiom

Changed by DTHOMPSON at 25-Jun-80 10:54:55 from SPECIFICATION

Modified to add check for unbound variables on rhs.

- Convert** Changed by DTHOMPSON at 25-Jun-80 10:55:37 from INFIXPRINT
Modified to Shorten its operand if necessary.
- Define** Changed by DTHOMPSON at 25-Jun-80 10:56:22 from SPECIFICATION
Modified to check for unbound variables on the rhs.
- EmbeddedQuantifier** Changed by DTHOMPSON at 25-Jun-80 10:56:57 from NEW
New routine encapsulating check for quantifiers in expression. Not very general.
- FindIHs** Changed by DTHOMPSON at 25-Jun-80 10:57:39 from NEW
New routine that searches through an expression, collecting all the subexpressions whose operator is IH.
- Infix** Changed by DTHOMPSON at 25-Jun-80 10:58:25 from SPECIFICATION
Modified to not reset any operator whose name has been set previously.
- MakeProgramLevels** Changed by DTHOMPSON at 25-Jun-80 10:58:53 from NEW
New routine that places all the program levelling stuff together. Conjecture: never called (!?!).
- NewMakeLevels** Changed by DTHOMPSON at 25-Jun-80 10:59:28 from INFIXPRINT
Modified to remove all the leveling pieces involved with programs, rather than propositions. (It all went to routine MakeProgramLevels.)
- NewPrintFormula** Changed by DTHOMPSON at 25-Jun-80 11:00:09 from INFIXPRINT
Modified to worry about (NOT (EQ x y)) explicitly, and print it as (NE x y).
- NoFreeVarsInRule** Changed by DTHOMPSON at 25-Jun-80 11:00:40 from NEW
New routine that, given a rule, checks the rhs to ensure its free vars are a subset of the free vars of the lhs. To avoid mistaking constants of a type as vars, the expression should be type-checked-and-translated first.
- OperatorPrecedence** Changed by DTHOMPSON at 25-Jun-80 11:01:58 from NEW
New routine that encapsulates the determination of an operator's binding strength. Someday will be stored on prop list of operator, or something. Previously all listing routines "knew" the precedence was on the prop list of a certain variable. Now they don't; only this routine does.

- PrintingSwitchValue** Changed by DTHOMPSON at 25-Jun-80 11:03:36 from INFIXPRINT
Modified to ensure the operators are Shortened before comparing to other pre-shortened ops.
- PrintMisc1Line** Changed by DTHOMPSON at 25-Jun-80 11:04:06 from INFIXPRINT
Modifid to shorten its operator before comparisons with other pre-shortened ops.
- PrintPrefixFunction** Changed by DTHOMPSON at 25-Jun-80 11:04:28 from INFIXPRINT
modified to handle IH printouts specially: second parameter is translated to node name if possible (currently in comment brackets, since user can't type in node name, but must use number).
- PrintQexpression** Changed by DTHOMPSON at 25-Jun-80 11:05:45 from INFIXPRINT
Modified to use OperatorPrecedence routine.
- PrintQuantifiers** Changed by DTHOMPSON at 25-Jun-80 11:06:11 from INFIXPRINT
Modified to avoid ghost find variables, where a given var USED to depend on a find var, which has since been instantiated. The Qexpression internal form remembers the dependency (perhaps erroneously; under discussion with D. Musser); but the pretty printout will ignore it for the time being.
- Schema** Changed by DTHOMPSON at 25-Jun-80 11:08:01 from SPECIFICATION
Modified to check for unbound vars on the rhs.
- AffirmCompile** Changed by DTHOMPSON at 25-Jun-80 13:05:28 from <AFFIRM>CPATCH-104..1
Fixed bug that caused it to always overwrite the top version of the com file, if there was one. Now it'll write into a new file, as it is supposed to.
- Completer** Changed by DTHOMPSON at 25-Jun-80 13:08:11 from LOGIC
Modified rule listings to conform to output formats used elsewhere: lhs == rhs.
- ElementsIn** Changed by DTHOMPSON at 25-Jun-80 13:10:43 from NEW
New routine thats counts the number of atoms/elements in a list. Used to help estimate whether the remaining expression will fit on the remainder of the line.
- FitsOnLine** Changed by DTHOMPSON at 25-Jun-80 13:11:54 from FORMULAIO
Modified to use ElementsIn rather than (erroneous use of) FLENGTH.

- MakeAnd** Changed by DTHOMPSON at 25-Jun-80 13:12:46 from CEVAL
Modified to check BOTH parameters for constant values of TRUE or FALSE.
- MakeImplies** Changed by DTHOMPSON at 25-Jun-80 13:52:23 from CEVAL
modified to check both params for constant values.
- MakeNot** Changed by DTHOMPSON at 25-Jun-80 13:53:19 from CEVAL
modified to handle more cases: other NOTs, ANDs, ORs, and IMPs.
- Normalize** Changed by DTHOMPSON at 25-Jun-80 13:54:03 from THEOREMPROVER
modified to not print out the prop before raising embedded ifs, if the profile entry AutoCases is On.
- Plural** Changed by DTHOMPSON at 25-Jun-80 13:54:52 from AFFIRMEXEC
modified to take either a list or a list length (FIXED) as its second parameter.
- RemoveCommonParts** Changed by DTHOMPSON at 25-Jun-80 13:56:11 from NEW
added two new patterns to look for and collapse: if B1 then (if B2 then X else Y) else Y == if (B1 imp B2) then Y else X; and if B1 then X else (if B2 then Y else X) == if (B2 imp B1) then X else Y.
- Removelfs** Changed by DTHOMPSON at 25-Jun-80 13:59:33 from CEVAL
fixed (small!) bug causing it to not to be consistent as to whether or not it was producing ORs.
- RemovelfsFromIf** Changed by DTHOMPSON at 25-Jun-80 14:01:28 from CEVAL
Modified to call RemoveComonParts; RemoveCommonParts is an encapsulatable part of this routine.
- addRuleCannot** Changed by DTHOMPSON at 25-Jun-80 14:02:17 from LOGIC
Modified to use rule listing format consistent with rest of system.
- addRuleDirection** Changed by DTHOMPSON at 25-Jun-80 14:03:12 from LOGIC
Modified to use rule listing format consistent with rest of system.
- getViewableElements** Changed by DTHOMPSON at 25-Jun-80 14:03:40 from FORMULAIO
modified output of commands and print objects to eat synonyms, only print main entries.

- listOneRule** Changed by DTHOMPSON at 25-Jun-80 14:17:49 from FORMULAIO modified to be smarter about how much can fit on a line when listing a rule. Uses FitsOnLine, and the profile entry RuleLHSPercentage is now obsolete.
- listRewriteRules** Changed by DTHOMPSON at 25-Jun-80 14:18:37 from FORMULAIO modified to break up output of long lists of rules into groups, therefore making them less costly in reading back in, bothj in terms of list space in the parse tree, and in the case of errors,
- listRuleMatches** Changed by DTHOMPSON at 25-Jun-80 14:19:32 from FORMULAIO uses rule listing format consistent with rest of system.
- AddToFile** Changed by RBATES at 26-Jun-80 22:42:08 from UTILITY Removes duplicates from the list of things now.
- GenNewSymbols** Changed by RBATES at 26-Jun-80 22:43:08 from VCGEN Calls the new declareVar which tell GenNewSymbols if it ok to declare a variable of that type. Before the code assumed that if a variable existed it was of the right type!
- MakeFunction** Changed by RBATES at 26-Jun-80 22:44:22 from REWRITERULE Always overwrite the function instead of checking to see if one existed and assumed it was the right one. This change was to fix the problem that happend when one tried to overwrite a interface (the system state was inconsitent).
- MakeInterfaceRule** Changed by RBATES at 26-Jun-80 22:45:47 from SPECIFICATION Calls discardInterface now if its about to overwrite an Interface.
- NoteInterfaces** Changed by RBATES at 26-Jun-80 22:46:27 from SPECIFICATION Check to see if the Interface is already on the property list, If it is this function is a no-op.
- declareVar** Changed by RBATES at 26-Jun-80 22:47:30 from SPECIFICATION Fixed two problems. The first was that redeclaring a variable didn't work. The redeclared variable now are removed and a note is printed explaining possible problems. Also added a new parameter which is used by GenNewSymbols to return NIL if the system would have to redeclare a variable or T if the system declared a variable.
- discardInterface** Changed by RBATES at 26-Jun-80 22:52:06 from NEW This function does what is necessary to discard a interface. Also prints a message explaining possible problems.

- discardVariable** Changed by RBATES at 26-Jun-80 22:53:11 from NEW
This function does what is necessary to discard a variable. Also prints a message explaining possible problems.
- AddArc** Changed by RBATES at 26-Jun-80 22:54:34 from NEW
Cleaned up the code by using XEVAL names instead of quoted variables.
- Separation** Changed by RBATES at 26-Jun-80 22:55:17 from NEW
Cleaned up the code by using XEVAL names instead of quoted variables.
- SeparationContradiction**
Changed by RBATES at 26-Jun-80 22:55:26 from NEW
Cleaned up the code by using XEVAL names instead of quoted variables.
- UseSeparations** Changed by RBATES at 26-Jun-80 22:55:35 from
<ERICKSON>SEPTHEORY..1
Cleaned up the code by using XEVAL names instead of quoted variables.
- normint** Changed by RBATES at 26-Jun-80 22:55:41 from
<ERICKSON>SEPTHEORY..1
Cleaned up the code by using XEVAL names instead of quoted variables.
- DeclareType** Changed by RBATES at 28-Jun-80 10:42:56 from SPECIFICATION
Protected the calls to MakeFunction so that they weren't called if this function was being called from an Interlisp file. This is done so that MakeFunction won't smash some functions it shouldn't.

Changes to version 103

These functions have changed:

- IfThenElse** Changed by RBATES at 7-Apr-80 21:58:47 from CEVAL
Added an extra parameter to the call of trueBranch.
- IfThenElse1** Changed by RBATES at 7-Apr-80 21:59:04 from CEVAL
Added an extra parameter to the call of trueBranch. Also added the MEMBER tests back again, which were removed so that a renaming problem would not happen so often.
- addFact** Changed by RBATES at 7-Apr-80 21:59:34 from CEVAL
The fact that is being added is being simplified. If the fact is already on Assumed then the routine will do nothing.
- addIntegerFacts** Changed by RBATES at 7-Apr-80 21:59:56 from CEVAL
Add the fact that $i < j$ and $j \leq i+1 \text{ imp } i=j-1 \text{ and } i+1=j$; This routine also check is see there is contradiction between Assumed and Denied, if so returns FALSE.
- falseBranch** Changed by RBATES at 7-Apr-80 22:00:27 from CEVAL
This routine returns FALSE if addIntegerFacts returns FALSE.
- trueBranch** Changed by RBATES at 7-Apr-80 22:00:45 from CEVAL
This routine returns the eval of the new third parameter, which is the value of the falseBranch, if addIntegerFacts returns FALSE.
- If1?** Changed by ERICKSON at 7-Apr-80 23:43:01 from NEW
Helper function for IfThenElse0. Decides whether to reevaluate (calling IfThenElse1) or just construct an IFOP expression, based on Assumed and Denied. (If both are NIL, then we're at the top-level, and should reeval.)
- IfThenElse0** Changed by ERICKSON at 7-Apr-80 23:43:11 from CEVAL
See Qexpression for a description of the renaming problem. When pulling a Qexpression up from below, we are careful not to reevaluate the result until renaming has protected us from name conflicts with Assumed/Denied. Added helper functions If1? and MergeQexsForIf0.
- MergeQexsForIf0** Changed by ERICKSON at 7-Apr-80 23:43:19 from NEW
New helper function for IfThenElse0. Avoids repeated code. Called when :test is a Qexpression and one (or more) of :then, :else are trivial. Does the renaming stuff.

- Qexpression** Changed by ERICKSON at 7-Apr-80 23:43:33 from LOGIC
We had a problem with variable renaming. Entries on Assumed and Denied could conflict with the bound variables of a Qexpression; since the :expr part gets evaluated before renaming occurs, improper simplification was possible. Therefore, Qexpression will now rebind A/D to avoid conflicts; IfThenElse0 will reevaluate later on.
- ALL\Boolean** Changed by ERICKSON at 7-Apr-80 23:43:51 from BOOLEAN
Has been made an NLAMBDA, to handle the name conflicts with Assumed/Denied. (see Qexpression). Rebinds Assumed,Denied. Note that all definitions which call "all" or "some" must be recompiled!
- SOME\Boolean** Changed by ERICKSON at 7-Apr-80 23:44:18 from BOOLEAN
Made an NLAMBDA. See ALL\Boolean.
- CompileRuleIntoLisp** Changed by ERICKSON at 8-Apr-80 22:58:05 from REWRITERULE
An old coding error blew up when editing a compiled function, if it was Makefile'd "fast" (COND instead of IF)
- Define** Changed by ERICKSON at 8-Apr-80 22:58:15 from SPECIFICATION
Bugfix: supplied a duplicate interface if LHS had no arguments.

Changes to version 100

These functions have changed:

- DeclareFun** Changed by ERICKSON at 21-Jan-80 22:15:57 from SPECIFICATION
Computes the proper equality operator and stores it on the EqualOp property of the extended function
- InterfaceDefined** Changed by ERICKSON at 21-Jan-80 22:16:23 from SPECIFICATION
Compatible with the new generic interface mechanism
- Rule** Changed by ERICKSON at 21-Jan-80 22:16:45 from LOGIC
No longer attempts to compute the EqualOp. This failed when it was triggered while in a foreign type
- AFFIRMSpellingCorrect**
Changed by DTHOMPSON at 29-Jan-80 16:48:23 from HELP
Modified to fix small bug in returning default value upon no close match found in non-interactive mode.
- ReduceRespellingsInteractively**
Changed by DTHOMPSON at 29-Jan-80 16:48:41 from HELP
modified to provide default to AFFIRMUSER for batch mode.
- AFFIRMUSER** Changed by DTHOMPSON at 29-Jan-80 16:48:53 from UTILITY
Made more robust to avoid calling ASKUSER with non-NIL default when the wait value is non-FIXP; wait value is also guaranteed to be either NIL or a FIXP. This routine will shortly be able to handle batch mode, but for now, will quietly ignore the parameters being handed it for batch mode.
- Normalize** Changed by ERICKSON at 29-Jan-80 16:49:44 from THEOREMPROVER
Fixes a problem in printing the proof tree. When it succeeds, now creates a transformation with ONE child, as opposed to none.
- InsertInterfaces** Changed by ERICKSON at 29-Jan-80 16:51:17 from SPECIFICATION
Subsumed by Translate
- Rule** Changed by ERICKSON at 29-Jan-80 16:51:27 from LOGIC
Computes the EqualOp if it doesn't exist; this is used for old data-type files
- Translate** Changed by ERICKSON at 29-Jan-80 16:51:38 from SPECIFICATION
Now does all the evaluation itself, instead of EVALing something created by InsertInterfaces.

- TypeOfExpression** Changed by ERICKSON at 29-Jan-80 16:51:50 from SPECIFICATION
Accepts an optional new arg, foreignType, which causes us to use
a different variable context.
- AFFIRMHelp** Changed by DTHOMPSON at 29-Jan-80 16:54:34 from HELP
Modified to use new calling procedure for Unexpected.
- AffirmSave** Changed by RBATES at 29-Jan-80 21:35:47 from AFFIRMEXEC
Rebound HELPDEPTH when calling MAKEFILE. This will cause the
normal MAKEFILE error messages and response when an error
occurs.
- DeclareType** Changed by RBATES at 29-Jan-80 21:36:11 from SPECIFICATION
This function is called when a data-type is loaded from an Interlisp
file. It used to do /PUTD to nil for all the functions in the old data
type, but in an compiled file the functions might have been read in
already therefore we can not do that. It is used the second
argument DontRedeclareComs to tell if it reading an Interlisp file.
- GenericInterface** Changed by RBATES at 29-Jan-80 21:37:11 from SPECIFICATION
Fixed the calls to dwimuserfun to reflect how it was done before.
- InitDtvs** Changed by RBATES at 29-Jan-80 21:37:30 from UTILITY
Removed the call to NoteInterfaces for ALL\Logic and SOME\Logic.
These functions are now in Boolean so we won't get into trouble
with handcoded report calls.
- InitXevalDtvs** Changed by RBATES at 29-Jan-80 21:37:55 from UTILITY
Set ALLOP to ALL\Boolean and SOMEOP to SOME\Boolean.
- MakeFunction** Changed by RBATES at 29-Jan-80 21:38:08 from REWRITERULE
Changed a DEFINE to /PUTD.
- MakeInterfaceRule** Changed by RBATES at 29-Jan-80 21:38:18 from SPECIFICATION
Removed an check that would prevent this function from redefining
an new interface function if an old one existed. This check should
not be needed anymore.
- SetupFile** Changed by RBATES at 29-Jan-80 21:38:52 from SPECIFICATION
Remove the property FILEDATES and FILE if the new data-type is
redefining an Interlisp File. This should make MAKEFILE happy.
- TryChainingsAndNarrowings** Changed by RBATES at 29-Jan-80 21:39:18 from LOGIC
Fixed a problem with search that made search go on after it had
found the right substitution.

UpdateAffirm Changed by RBATES at 29-Jan-80 21:39:38 from UTILITY
Inserted an U-CASE call since PV\BASIS\FILES is now upper and lower case.

ZapSkolemFunctions Changed by RBATES at 29-Jan-80 21:39:56 from LOGIC
Made the PUTD undoable. It was safe to call PUTD but just to be safe, we are calling /PUTD.

APG Changed by RBATES at 3-Feb-80 22:08:59 from PROFILE
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

AllSafe Changed by RBATES at 3-Feb-80 22:09:05 from SUFFICIENT
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

AscendBy Changed by RBATES at 3-Feb-80 22:09:10 from TREE
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

CallEditor Changed by RBATES at 3-Feb-80 22:09:12 from UTILITY
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

CircularSubs1 Changed by RBATES at 3-Feb-80 22:09:14 from LOGIC
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

DeclareFun Changed by RBATES at 3-Feb-80 22:09:15 from SPECIFICATION
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

Dok Changed by RBATES at 3-Feb-80 22:09:16 from SUFFICIENT
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

DokII Changed by RBATES at 3-Feb-80 22:09:17 from SUFFICIENT
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

FlagArcDescent Changed by RBATES at 3-Feb-80 22:09:18 from TREE
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

GenNewSymbols Changed by RBATES at 3-Feb-80 22:09:20 from VCGEN
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

GetChild Changed by RBATES at 3-Feb-80 22:09:21 from TREE
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

GetConjunct Changed by RBATES at 3-Feb-80 22:09:24 from UTILITY
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

GetLHSide Changed by RBATES at 3-Feb-80 22:09:26 from REWRITERULE
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

NewSymbolFrom Changed by RBATES at 3-Feb-80 22:09:27 from LOGIC
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

PrintFormula Changed by RBATES at 3-Feb-80 22:09:28 from INFIXPRINT
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

SafeOutputAxioms Changed by RBATES at 3-Feb-80 22:09:29 from SUFFICIENT
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

TeditLVLPRIN Changed by RBATES at 3-Feb-80 22:09:31 from TEDIT
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

TeditPrint Changed by RBATES at 3-Feb-80 22:09:32 from TEDIT
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

ZapRule Changed by RBATES at 3-Feb-80 22:09:33 from REWRITERULE
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

computeLispCode Changed by RBATES at 3-Feb-80 22:09:34 from REWRITERULE
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

extractinstead Changed by RBATES at 3-Feb-80 22:09:36 from TEDIT
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

storage Changed by RBATES at 3-Feb-80 22:09:37 from UTILITY
Changed MEMB to FMEMB, ASSOC to FASSOC and NTH to FNTH.

Translate Changed by ERICKSON at 5-Feb-80 22:54:02 from
<AFFIRM>CPATCH-35.;1
Cosmetic changes, comments.

AFFIRMWHEREIS Changed by RBATES at 5-Feb-80 23:43:20 from NEW
This function replaces the function WHEREIS. It checks to see if
the hash file version of whereis will work, before it calls it, fixing a
problem of breaking on not finding WHEREIS.HASH file. All files
returned are checked to see if the FILEDATES property can be
made correct by BadFile.

AffirmInitAfterMakesys
Changed by RBATES at 5-Feb-80 23:44:59 from UTILITY
Removed the call to LoadUserInitializationFile.

AffirmMakesys Changed by RBATES at 5-Feb-80 23:45:26 from UTILITY
Calls the routine InitializePart2.

AffirmSysoutInit Changed by RBATES at 5-Feb-80 23:45:49 from UTILITY
Now calls LoadUserInitializationFile if AFFIRMINITFIRSTTIME is true.

- BadFile** Changed by RBATES at 5-Feb-80 23:46:11 from NEW
This function is the "standard" way of fixing bad file names. The first trick this function uses (PACKFILENAME (UNPACKFILENAME --)) which fixes tenex files names on tops-20. If this fails it uses the variable SearchBadFile to try to fix the file file name. If this function succeeds it return the property file name, else nil.
- CompileRuleIntoLisp** Changed by RBATES at 5-Feb-80 23:47:20 from REWRITERULE
Removed a check to make sure that rule being compiled, was set to NOBIND. The new way of doing GenericInterfaces, made this check unnecessary. Also if MakeFunction is called, which I don't think it will be, the user will be asked to send the transcript to the PV group.
- CorrectOneFileDate** Changed by RBATES at 5-Feb-80 23:48:19 from NEW
Fixes the FILEDATE property for the given file, so it point at an legal file, uses BadFile to do this.
- Debug** Changed by RBATES at 5-Feb-80 23:48:51 from NEW
New routine that changes the MINFS for each type to the Interlisp default and sets up MasterScope database to ask wheter or not to save or load a masterscope database for a given file. (Debug T) will restore the state back to the system default.
- DeclareFun** Changed by RBATES at 5-Feb-80 23:49:59 from <RBATES>FAST.; 12
Placed a check to make sure the arguments supplied to the function being declared aren't duplicated. (FOO a a) is an no-no.
- InitializePart1** Changed by RBATES at 5-Feb-80 23:50:44 from NEW
This routine used to be call InitDtvs. This is called to Initialize Affirm after all the Interlisp files that make up affirm are loaded.
- InitializePart2** Changed by RBATES at 5-Feb-80 23:51:28 from NEW
This routine finishes up Initializing Affirm after all the pre-defined data types are loaded.
- MAKESYSTEM** Changed by RBATES at 5-Feb-80 23:52:15 from UTILITY
This routine now replaces the function WHEREIS by AFFIRMWHEREIS. Also changed the ASKUSER calls to be AFFIRMUSERS.
- NextAffirmVersion** Changed by RBATES at 5-Feb-80 23:52:52 from NEW
This function increments the version count for affirm by one. Uses the file <AFFIRM>VERSION.AFFIRM as a database.

ReInitializeAffirm Changed by RBATES at 5-Feb-80 23:53:29 from NEW
This function is the proper way to make an sysout version of Affirm look like an regular affirm. Takes an parameter to indicate wheter or not to call NextAffirmVersion, the default is not to. So if an user want to use this function, he would do E (ReInitializeAffirm) followed by the freeze command.

WhatChanged Changed by RBATES at 5-Feb-80 23:54:30 from REQUEST
This function now closes any files that were open while it was running.

getComment Changed by RBATES at 6-Feb-80 16:00:15 from REQUEST
This routine is used to collect comments for the request package. It will now copy the comment verbatim and not do any formating.

printChanged1 Changed by RBATES at 6-Feb-80 16:00:41 from REQUEST
Fix a problem caused by printout issuing an carriage return at the wrong place as far as scribe was concerned.

readPreviousVersion Changed by RBATES at 6-Feb-80 16:01:06 from REQUEST
Now calls EVALV to test if the Previous Version file was read in.

requestCommentToFile
Changed by RBATES at 6-Feb-80 16:01:20 from REQUEST
Comments for the current release functions are stored in a different file than comments for old released functions. This routine had to be modified to copy the comments verbatim.

next Changed by DTHOMPSON at 6-Feb-80 16:02:02 from TREE
Changed call to Unexpected

transcript Changed by RBATES at 6-Feb-80 16:02:01 from AFFIRMEXEC
Now calls DIRECTORYNAME instead of USERNAME for TOPS-20 sites.

exec Changed by RBATES at 6-Feb-80 16:19:29 from UTILITY
Fixed a problem that caused SUBSYS to go into a break, when the fork handle was not right.

GetLabel Changed by ERICKSON at 6-Feb-80 16:37:51 from NEW
Given a parent and direct child, returns the corresponding arc label (if any)

next Changed by ERICKSON at 6-Feb-80 16:37:55 from
<DTHOMPSON>FIXS35.;19
When going to another leaf, tells user the arc label (if any) of the leaf node. A small step toward what we'd like.

MakeInterfaceRule Changed by RBATES at 7-Feb-80 16:05:15 from
<AFFIRM>CPATCH-35.;1
Takes a new parameter, the list of arguments already
typed-checked by Translate. This avoids re-duplicating the
Translate call.

Translate Changed by RBATES at 7-Feb-80 16:05:55 from
<ERICKSON>MYPATCHES.;8
Modify to call the new function TranslateLitAtom.

DeclareFun Changed by RBATES at 7-Feb-80 16:06:13 from
<RBATES>2CPAT35.;34
Passes the new parameter to MakeInterfaceRule to avoid calling
Translate twice.

DWIMUSERFN Changed by RBATES at 7-Feb-80 16:06:28 from UTILITY
Fix some bugs in the way DWIMUSER was recovering after the user
had declare variables of new functions.

TranslateLitAtom Changed by RBATES at 7-Feb-80 16:06:53 from NEW
This functions does what the name implies, Translate's LITATOMS
using CurrentContext. If can't find the argument in CurrentContext
it calls GenericInterface. This function is also used by
DWIMUSERFN.

NoteFiles Changed by RBATES at 7-Feb-80 21:33:19 from REQUEST
Change how NoteFiles was detecting if it has a valid hash file or
not.

setupDeclarations Changed by MUSSER at 7-Feb-80 22:05:16 from PASCAL
Now handles pascal function declarations. The program: FUNCTION
foo (A:Integer) :Boolean will now declare A:Integer and the
interface foo (A) :Boolean.

SETUPCALLVCGEN Changed by MUSSER at 7-Feb-80 22:06:06 from VCGEN
Should now generate the proper VCS for pascal functions. Affirm
requires explicit return statements, and does not follow the pascal
convention of assignment to variable that is the name of the
function being called.

setupDeclarations Changed by RBATES at 7-Feb-80 23:18:28 from
<MUSSER>FUNFIX.;5
This function will now always declare both plain and primed
variables for the formal parameter. Used to only declare primed
variables for VAR parameters.

split	Changed by ERICKSON at 7-Feb-80 23:31:08 from THEOREMPROVER Gives arc labels to as many as 8 children, fixing Gerhart's bug of 13-Jan-80
NoteDeclarations	Changed by ERICKSON at 7-Feb-80 23:31:18 from SPECIFICATION Undoable
Report	Changed by ERICKSON at 7-Feb-80 23:31:34 from UTILITY Removed references to REPORTKINDS
printProofNode	Changed by ERICKSON at 7-Feb-80 23:31:47 from TREE 1.0 If there are several unlabelled children, they get indented (to distinguish from a single chain of actions) 2.0 Modified the algorithm by which labelled children point out their parents (for example second:{Subseqself, apr:}) . Comments solicited.
SplitIntoSubgoals	Changed by ERICKSON at 7-Feb-80 23:32:21 from THEOREMPROVER Ever since the new treatment of IfThenElse, we were occasionally producing an extra case, TRUE
invoke	Changed by ERICKSON at 7-Feb-80 23:32:26 from THEOREMPROVER When given several arguments, they now get printed properly in the tree
RemoteTypeOf	Changed by ERICKSON at 7-Feb-80 23:32:30 from SPECIFICATION Put in a check for variables with no extension; they used to give us type NIL!
keep	Changed by RBATES at 13-Feb-80 22:02:24 from THEOREMPROVER Placed a warning not to use this command.
enter	Changed by RBATES at 13-Feb-80 22:02:47 from THEOREMPROVER Placed a warning not to use this command.
Instance	Changed by ERICKSON at 20-Feb-80 16:29:33 from LOGIC Fixed to use new format of RuleList. Also added comments to try to explain what it does, format of quantification
Matcher	Changed by ERICKSON at 20-Feb-80 16:29:48 from REWRITERULE Comments
Qexpression	Changed by ERICKSON at 20-Feb-80 16:29:57 from LOGIC Comments

- DWIMUSERFN** Changed by ERICKSON at 20-Feb-80 16:30:03 from
<AFFIRM>CPATCH-35.;2
Removed reference to DefaultType (which was NOBIND anyway)
- Normalize** Changed by ERICKSON at 20-Feb-80 16:30:16 from
<AFFIRM>CPATCH-35.;2
The normalize command now calls Instance, to make it a little more powerful at fixing normalization bugs. If successful, it prints a note asking the user to notify us of the bug (unless s/he expected this, as a result of axiom changes). Also added a PROG.
- TryChainingsAndNarrowings**
Changed by RBATES at 20-Feb-80 22:09:33 from
<RBATES>CPAT35.;19
Search will not go into an infinite loop when Chainings return the null substitution. Search should not have to do this check if normalization is working, but if it happens then search will print a message and go on.
- printProofNode** Changed by ERICKSON at 20-Feb-80 22:50:00 from
<AFFIRM>CPATCH-35.;2
If a node has unlabelled children, separates them with blank lines. (Otherwise, they would just run into each other.)
- SplitIntoSubgoals** Changed by ERICKSON at 20-Feb-80 22:50:06 from
<AFFIRM>CPATCH-35.;2
Fixed bug: since the change to IfThenElse, produced subgoals which contained predicates not properly embedded in IfThenElse. These gave us normalization problems later down the road.
- Affirm/ADDPROP** Changed by RBATES at 21-Feb-80 22:54:53 from NEW
The function /ADDPROP does not work in Interlisp as of version 133 as far as being able to undo the effects. This function replaces /ADDPROP in Affirm.
- InitXevalDtv** Changed by RBATES at 21-Feb-80 22:55:34 from
<AFFIRM>CPATCH-35.;2
The integer axioms used to rewrite everything in terms of LE's and the function BINXEval which has handcoded around LE would turn some LE's back into LT's. This switch can cause problems with EvalRules and ApplyRules (then can loop) . Now LE, LT, GE, and GT have BINXEval calls around them so the switch back and forth won't happen (this is done by InitXevalDtv) . It is still open question whether or not one can modify any of those operators which have a BINXEval call around them.

InsertExtensions Changed by RBATES at 21-Feb-80 22:57:51 from SPECIFICATION
Fix a problem which resulted from calling Translate1 instead of
TranslateLitAtoms. Translate1 should not be called anymore.

MakeNot Changed by RBATES at 21-Feb-80 22:58:08 from CEVAL
Handles GE, GT, LT and LE's now.

NotifyMailer Changed by RBATES at 21-Feb-80 23:06:18 from UTILITY
Added PS: when looking for <SYSTEM>MAILER.FLAGS on TOPS-20.

AFFIRMMAPRINT Changed by DTHOMPSON at 24-Feb-80 21:25:53 from UTILITY
Cleaned up a bit, and calling sequence changed to be consistent:
now, T for third parm means default (" and ") ; NIL means no
value, and non-NIL, non-T means use it (third parm is last
separator) .

AFFIRMUSER Changed by DTHOMPSON at 24-Feb-80 21:26:31 from
<AFFIRM>CPATCH-35.;1
modified 2 ways: (1) will now always supply CONFIRMFLG T and
PROMPTCONFIRMFLG T if the 2 keywords are not already supplied
in the option list (to get their value to be NIL, just explicitly supply
them with the value NIL) . (2) now has a " batch " mode which
attempts to use either a default or user-supplied answer (see
description of " batch " comand) . Calling sequence uses the
second parameter, default, to provide the programmer's suggested
default. NIL means no default, error; T means just return NIL as the
value of the interaction.

batch Changed by DTHOMPSON at 24-Feb-80 21:27:57 from NEW
New routine that's the command function for the new command "
batch " . takes two parameters, a switch and an answer list.
switch is one of {on, off, semi}, where the default if not supplied is
" on " , and " semi " presently does just what " on " does (trying
to be flexible!) . answerlist is either empty or a list of answers, TO
BE USED IN ORDER (I'll try to relax this restrictin as we " label "
the interactions, so that the answer list will be a sequence of
pairs: label,answer) . The purpose of the batch mode is to allow
the user to start a session, and then walk away, not fearing that
the terminal will get hung on some " unexpected " interaction
request.

Transform Changed by DTHOMPSON at 24-Feb-80 21:33:43 from TREE
modified affirm maprint call to use new calling sequence.

Try Changed by DTHOMPSON at 24-Feb-80 21:34:03 from TREE
modified affirm user call.

- unUpdateFunction** Changed by DTHOMPSON at 24-Feb-80 21:34:28 from REQUEST modified affirmuser call, printout formats.
- UpdateFunction** Changed by DTHOMPSON at 24-Feb-80 21:34:36 from REQUEST modified affirm user calls, printuot formats.
- UpdateLineDeleteMessage**
Changed by DTHOMPSON at 24-Feb-80 21:34:43 from AFFIRMEXEC modified call to unexpected.
- UserProfileEnquiry** Changed by DTHOMPSON at 24-Feb-80 21:34:51 from PROFILE modified calls to affirm user.
- ValidateFileName** Changed by DTHOMPSON at 24-Feb-80 21:35:02 from NEW new routine that encapsulates a piece of code from declaretype which checks the atom name of a proposed type name, and sees if it can be a file name (is it being used already?).
- Translate** Changed by RBATES at 24-Feb-80 23:42:31 from <AFFIRM>CPATCH-35.;2
To save useless conses, the call to GenericInterface which used to use an APPLY was replace by the compiler macro TranslateApply. This compiler macro normaly won't use any conses to call GenericInterface.
- TranslateApplyMacro**
Changed by RBATES at 24-Feb-80 23:43:11 from NEW
Does the work of expanding the compiler macro TranslateApply which is used in the function Translate.
- GtjfnHelp** Changed by RBATES at 24-Feb-80 23:45:13 from NEW
Does all the work that TTYINFILE and TTYOUTFILE used to do. Also calls InitializeLongGtjfn which implements an long gtjfn call when appropriate.
- InitializeLongGtjfn** Changed by RBATES at 24-Feb-80 23:45:44 from NEW
Sets up a long GTJFN call by filling in appropriate fields with Default values.
- TTYINFILE** Changed by RBATES at 24-Feb-80 23:46:04 from UTILITY
Simply calls GtjfnHelp to all the work. Has a new parameter File, Which If supplied will cause an long gtjfn call instead of short one.
- TTYOUTFILE** Changed by RBATES at 24-Feb-80 23:46:32 from UTILITY
Simply calls GtjfnHelp to do all the work. Has a new parameter File, Which If supplied will cause an long gtjfn call instead of a short one.

- printChanged** Changed by RBATES at 25-Feb-80 21:56:13 from REQUEST
Got rid of blanklines=hinge. Grouping is handle by printChanged1.
- printChanged1** Changed by RBATES at 25-Feb-80 21:56:35 from
<AFFIRM>CPATCH-35.;2
Surrounded each desription with an Multiple enviroment (you can
have paragraphs when describing what you did) . Also placed a
hinge command before each description.
- UpdateFunction** Changed by RBATES at 25-Feb-80 22:23:22 from
<DTHOMPSON>FIXS35.;34
If the function definiton is an expr then UpdateFunction will always
ask if you want to update the function. Used to do this only when
you call this function threw RequestFunction via the advise on
EDITF.
- AddCommand** Changed by DTHOMPSON at 26-Feb-80 21:29:44 from AFFIRMEXEC
modified to use new known names data structure, and to return a
value suitable for inclusion in a " P " command on a COMS list of a
file. Does NOT handle synonyms yet!
- AddCommandToHistory** Changed by DTHOMPSON at 26-Feb-80 21:30:28 from AFFIRMEXEC
modified to check for the LISPXISTORY being enabled before
saving pointers into its substructure.
- AddNeeds** Changed by DTHOMPSON at 26-Feb-80 21:30:48 from FORMULAIO
modified to remember only non-predefined types if called in the "
Implicit " mode (i.e., from declare and interface) .
- AddParametersToHistory** Changed by DTHOMPSON at 26-Feb-80 21:31:15 from AFFIRMEXEC
modified to check for enabling of History mechanism before
saving/modifying pointers into its supposedly extant substructures.
Does NOT yet handle file reading using GROUPS! (" Maybe next
time " , sung to the tune of " I'll never fall in love again. ") .
- AddRule** Changed by DTHOMPSON at 26-Feb-80 21:32:02 from LOGIC
modified AFFIRMUSER calls. Still need to make more robust the
mechanism that reads in user-generated rules when the user types
" Instead " to a question during the K-B process; the routine
accepting the rule does NOT allow " == " , just "= " , which is
inconsistent. Requires some playing...
- addRuleCannot** Changed by DTHOMPSON at 26-Feb-80 21:32:57 from LOGIC
modified calls to AFFIRMUSER.

addRuleDirection Changed by DTHOMPSON at 26-Feb-80 21:33:07 from LOGIC modified calls to AFFIRMUSER.

AFFIRMHelp Changed by DTHOMPSON at 26-Feb-80 21:33:12 from <AFFIRM>CPATCH-35.;1 modified call to Unexpected. modified method of displaying known commands; now uses PRINT command function directly, so output is exactly that obtained from " print known commands " .

AffirmPRINTBELLS Changed by DTHOMPSON at 26-Feb-80 21:35:38 from NEW New routine that encapsulates the INTERLISP PRINTBELLS routine, causing the control-G's to go to the terminal ONLY, and not to the transcript. This hopefully saves us hassles on transcript cleaning before SCRIBING them.

AffirmSave Changed by DTHOMPSON at 26-Feb-80 21:36:06 from <AFFIRM>CPATCH-35.;1 modified to accept TWO parameters: an object class and an object. The routine no longer directly implements the SAVE command; it now just saves an object in a file names according to rules established for the object's object-class. The two object classes it can handle presently are FILE and TYPE. File name conventions for type-files are defined, but not presently conformed to by this routine, since the input mechanism isn't smart enuf yet. (See new routine " save ").

askInNew Changed by DTHOMPSON at 26-Feb-80 21:38:07 from REQUEST modified calls to AFFIRMUSER.

askToContinue Changed by DTHOMPSON at 26-Feb-80 21:38:16 from REQUEST modified calls to AFFIRMUSER.

askToOwn Changed by DTHOMPSON at 26-Feb-80 21:38:22 from REQUEST

askWhereToGo Changed by DTHOMPSON at 26-Feb-80 21:38:32 from REQUEST modified calls to AFFIRMUSER.

CallEditor Changed by DTHOMPSON at 26-Feb-80 21:38:46 from <RBATES>FAST.;12 modified calls to AFFIRMUSER.

- CheckForType** Changed by DTHOMPSON at 26-Feb-80 21:38:55 from AFFIRMEXEC modified calls to AFFIRMUSER and Unexpected. Added call to ValidateFileName, before printing message " type not defined; should it be given minimal spec? " since we shouldn't lead the user on if the file name is usurped already. We now have a reasonable facility for handling references to undefined types. The system will (1) remember the reference, and add it to the " needs " info, for later use if the current type is ever loaded or re-read; and (2) either go off and hunt for the type spec, using " needs " , or minimally specify the type, under user direction.
- checkUser** Changed by DTHOMPSON at 26-Feb-80 21:41:19 from REQUEST modified calls to AFFIRMUSER.
- ClearTerminalBuffer** Changed by DTHOMPSON at 26-Feb-80 21:41:23 from NEW New routine that encapsulates the function of clearing and restoring the terminal buffers after an error or command spelling correction failure. (You'd think that clearing and then restoring wouldn't have much of an effect, but INTERLISP has this bug that clears a string buffer, which if empty is turned into NIL; then INTERLISP restores the string to NIL, which ain't the same thing as the null string. This routine fixes the problem.)
- decipherRuleMatchInput** Changed by DTHOMPSON at 26-Feb-80 21:42:11 from FORMULAIO modified to parameterize the debug output. The global variable controlling debug output is " PatternDebug " , initially NIL; It can be set to T by " e PatternDebug-T " at the AFFIRM command level. The " print lhs " mechanism still doesn't do everything it should.
- DeclareType** Changed by DTHOMPSON at 26-Feb-80 21:42:54 from <AFFIRM>CPATCH-35.;1 modified to use known names data structure, and ValidateFileName routine.
- declareVar** Changed by DTHOMPSON at 27-Feb-80 16:10:02 from SPECIFICATION modified calls to AFFIRMUSER.
- definedEntryName?** Changed by DTHOMPSON at 27-Feb-80 16:11:47 from PROFILE modified to use known names data structure.
- DeleteCommand** Changed by DTHOMPSON at 27-Feb-80 16:12:06 from AFFIRMEXEC modified to use known names data structure. Now returns a form suitable for inclusion as a " P " command in the COMS list. Handles synonym deletion correctly (but note that AddCommand doesn't!) .

DetermineObjectClass

Changed by DTHOMPSON at 27-Feb-80 16:12:58 from NEW
New routine that determines the object classes for a name by searching all the known names lists. If the number of object classes found is exactly one, this object class is simply returned; if no object classes are found, an AffirmError is generated; and if multiple object classes are found, then the user is asked which is meant. At present, the known names structure is simply searched, with no apparent order. A possible extension would be to give this routine one more parameter, which says " most likely a type name " , or something. Then the routine could avoid silly user interactions by using this context to prune the list of possibilities.

EditTheorem

Changed by DTHOMPSON at 27-Feb-80 16:30:55 from TEDIT
modified to NOT do its own input for annotations; that part of the code moved to ProcessCommand.

findDefinition

Changed by DTHOMPSON at 27-Feb-80 16:31:15 from REQUEST
modified calls to AFFIRMUSER.

GenericInterface

Changed by DTHOMPSON at 27-Feb-80 16:32:17 from <AFFIRM>CPATCH-35.;1
modified to call InterfaceError at the point where it would normally just perform an EVAL. (the whole thing is bizarre; the way to handle errors is to evaluate the offending interlisp form, which causes the Interlisp error mechanism to call DWIMUSERFN, which we have (quite cleverly) set up to notice this situation, and invoke a " lower" AFFIRM exec.) This effectively encapsulates just how we handle interface errors and messages about them.

GetArgumentsFromList

Changed by DTHOMPSON at 27-Feb-80 16:33:04 from AFFIRMEXEC
modified to return NIL if handed a NIL parameter list (used to return the list of args, thus <NIL> rather than NIL would have been returned).

GetCommand

Changed by DTHOMPSON at 27-Feb-80 16:33:29 from AFFIRMEXEC
modified to use ClearTerminalBuffer. modified to be more careful about looking for implicit E command references (it used to find some even when the profile mode was OFF).

getFileName

Changed by DTHOMPSON at 27-Feb-80 21:44:45 from AFFIRMEXEC
modified to use makeFileName. Not yet modified (but will be for AFFIRM-Version 37) to handle output files. Functional difference: upon non-recognition, the file name in the message " ... can't find file x " will be printed as a file name instead of a list of atoms.

getFileNameFromDirectory

Changed by DTHOMPSON at 27-Feb-80 21:45:27 from FORMULAIO modified to use new file name conventions. Currently used only for file output; it isn't really yet suited for generating the file name to be used on output. Soon! Currently, this routine recognizes the fileTypes Compiled (extension COM) , OldCompiled (extension xxCOM) , Saved (extension xxLISP) , OldSaved (extension empty) , Source (extension AXIOMS) , and DatedSource (extension xxAXIOMS) , where in each case " xx " is a version number, i.e., 36, referring to the version of AFFIRM in which the file was created.

getNewValue

Changed by DTHOMPSON at 27-Feb-80 21:46:38 from PROFILE modified calls to AFFIRMUSER. Now uses new routines gnvQuestion and gnvKeyList (cf. these notes) .

getViewableElements

Changed by DTHOMPSON at 27-Feb-80 21:47:22 from FORMULAIO modified to use the new data structures HiddenNames, PredefinedNames, ReservedNames, as appropriate. Now the displayable elements of most object classes are computed by the set equation (Known - Hidden) .

gnvKeyList

Changed by DTHOMPSON at 27-Feb-80 21:47:58 from NEW New routine encapsulating the computation of the correct key list for a particular profile entry. No functional difference seen by the user, just cleaner code!

gnvQuestion

Changed by DTHOMPSON at 27-Feb-80 21:48:19 from NEW New routine encapsulating the computation of the correct question for a particular profile entry. No functional difference seen by the user, just cleaner code!

gripe

Changed by DTHOMPSON at 27-Feb-80 21:48:38 from AFFIRMEXEC modified calls to AFFIRMUSER. Now calls DIRECTORYNAME rather than USERNAME.

InitializeKnownNames

Changed by DTHOMPSON at 27-Feb-80 21:48:58 from UTILITY modified to initialize the Hidden, Predefined, Reserved and Known names data structures.

InitializeLoad

Changed by DTHOMPSON at 27-Feb-80 21:49:15 from SPECIFICATION modified to use known names data structures.

- InitializeUserProfile** Changed by DTHOMPSON at 27-Feb-80 21:49:23 from PROFILE modified to write out a default user profile for the new user not having any profile at all. This will then be used in subsequent AFFIRM sessions.
- InterfaceError** Changed by DTHOMPSON at 27-Feb-80 22:01:43 from NEW New routine that attempts to fix interface errors, or at least provide more useful error messages about the exact cause of the error. This version simply falls through to the "panic" mode, EVALing the offending form so DWIMUSERFN can invoke a lower AFFIRM exec, and the user can then attempt to solve the problem him/her self. It will be extended in future versions; this is just the skeleton right now.
- IsType** Changed by DTHOMPSON at 27-Feb-80 22:02:22 from SPECIFICATION modified to use the known names data structures.
- let** Changed by DTHOMPSON at 27-Feb-80 22:02:27 from THEOREMPROVER modified calls to AFFIRMMAPRINT.
- listTypeParts** Changed by DTHOMPSON at 27-Feb-80 22:02:37 from FORMULAIO modified to use known names data structures. Also fixed bug that caused all definitions to be listed in non-grouped mode, regardless of the user's profile setting for DefineGrouping, which is supposed to control such groupings.
- Loaded?** Changed by DTHOMPSON at 27-Feb-80 22:03:05 from FORMULAIO modified to use known names data structures. Also extended to minimally specify any type not found. Obviously if the user then decides to specify the type he or she can over-write the minimal spec.
- loadNeededTypes** Changed by DTHOMPSON at 27-Feb-80 22:04:15 from FORMULAIO modified to use the known names data structures. Also extended to minimally specify any type not found in the search process.

ObjectClassOfParameters

Changed by DTHOMPSON at 27-Feb-80 22:04:44 from NEW

New routine that does what it name implies. Given an atom list just recently read from the input stream, it checks whether the first atom spelling-corrects to an object class name; if so, it calls GetArgumentsFromList (separately documented) on the rest of the atom list, and stores the resultant value in the global ParameterElements, and returns the (corrected) object class. If the first atom is NOT an object class name (and doesn't correct to one) , then GetArgumentsFromList is called, and the first list element of the result is handed to DetermineObjectClass, which will cycle through all the known object names, determining which class this thing could be. If a unique object class is determined (may involve asking the user which is desired in a particular case) , it's returned; again, the global ParameterElements has the arguments to the command. AffirmError syntax errors are generated for non-resolution, not enuf atoms and/or parameters, etc.

parse

Changed by DTHOMPSON at 27-Feb-80 22:05:43 from FORMULAIO
modified to use new routine ParsingError for error message output.

ParsingError

Changed by DTHOMPSON at 27-Feb-80 22:05:48 from NEW

New routine that outputs the syntax error message. Encapsulates a function called by lots of other routines (or will be soon) . Uses the profile entry ErrorTokensOutput to decide how many tokens to print to the left of the " error " point (the longest string matched so far) . That profile entry is default 15, but can be set to any number greater than 0.0

Partition

Changed by DTHOMPSON at 27-Feb-80 22:07:17 from SUFFICIENT
modified calls to AFFIRMUSER.

print

Changed by DTHOMPSON at 27-Feb-80 22:08:19 from AFFIRMEXEC
modified to use known names data structures; modified calls to AFFIRMMAPRINT. Simplified keys to alternatives of the case stmt (SELECTQ) , by complicating the print options spelling list with lots of synonyms.

printHelper

Changed by DTHOMPSON at 27-Feb-80 22:08:53 from FORMULAIO
see print; identical comments.

PrintPrompt

Changed by DTHOMPSON at 27-Feb-80 22:09:01 from AFFIRMEXEC
modified to be aware of UsingTed, for MIT-AFFIRM's sake. If the command file is the terminal, OR if we're Using Ted, and reading from the Ted interface command file, then provide a prompt.

ProcessCommand Changed by DTHOMPSON at 27-Feb-80 22:09:26 from AFFIRMEXEC modified the @ command to perform annotation input, rather than have the @ command processor do it. Added the " batch " , " echo " , and " step " commands, although it's a little premature for the echo and step commands, since what you change won't affect anything until the file reading stuff appears (next version??) . Modified the save command to accept an object class, followed by a sequence of elements of the object class, so you can save a bunch of things in one command. However, each element is saved on a separate file, presently.

readp Changed by DTHOMPSON at 27-Feb-80 22:10:44 from PASCAL modified calls to AFFIRMMAPRINT. modified to call ParsingError instead of outputting the error message itself.

redo Changed by DTHOMPSON at 27-Feb-80 22:11:02 from AFFIRMEXEC modified to use the known names data structures. Now takes the command file as its second parameter; used to reference it freely.

ReduceRespellingsInteractively

Changed by DTHOMPSON at 27-Feb-80 22:11:45 from <AFFIRM>CPATCH-35.;1 modified calls to AFFIRMUSER, AFFIRMMAPRINT.

reportProfileDBError Changed by DTHOMPSON at 27-Feb-80 22:11:58 from PROFILE modified calls to Unexpected.

save Changed by DTHOMPSON at 27-Feb-80 22:12:03 from NEW new routine that acts as command processor for the " save " command. Now takes an object class followed by a sequence of elements separated by commas. Can presently handle Files and Types. Other objects are ignored. If the object class is not specified, the first element is used to determine the object class. Note that each element is STILL saved on a separate file; the extension is purely syntactic ease, rather than functionality.

saveUserProfile? Changed by DTHOMPSON at 27-Feb-80 22:12:51 from PROFILE modified calls to AFFIRMUSER.

setGCmessage Changed by DTHOMPSON at 27-Feb-80 22:14:01 from AFFIRMEXEC modified calls to Unexpected.

SetName Changed by DTHOMPSON at 27-Feb-80 22:14:11 from TREE modified to use the known names data structures.

- SpellingSynonym** Changed by DTHOMPSON at 27-Feb-80 22:14:23 from HELP heavily modified to be much smarter about short forms as well as synonyms. If the user types in a piece of an identifier, if it can be extended to a unique name in the spelling list, it is, QUIETLY. If the user types in a piece of an identifier, followed by an escape, the name is expanded (if possible) automatically, again QUIETLY. If these techniques don't recognize the identifier, then the normal spelling correction is applied (you remember, all that stuff about finding the minimally maximal set of close matches, etc?) .
- TVCS** Changed by DTHOMPSON at 27-Feb-80 22:15:34 from VCGEN modified to use ParsingError routine.
- UserProfileEnquiry** Changed by DTHOMPSON at 27-Feb-80 22:15:48 from <DTHOMPSON>FIXS35.;34 modified calls to AFFIRMUSER to conform to the decisions regarding user interactions made as a result of the AFFIRM conference.
- Removelfs** Changed by DTHOMPSON at 28-Feb-80 22:46:25 from CEVAL modified to remove ifs from the arguments to operators that aren't ifs. Also modified to use the profile entry UseORinProps to decide whether to print the propositions using OR and EQV (if possible) , or to print things the " old " way.
- RemovelfsFromIf** Changed by DTHOMPSON at 28-Feb-80 22:48:57 from NEW new routine that is essentially the first half of the old function RemovelfsHelper. It performs case analysis on the test, then, and else branches of an if expression, trying to reduce the if to a combo of ands, ors, eqv,imps, etc. If it can't simplify the if exp, it calls RemovelfsCommonSubExps, which is essentially the second half of the old function RemovelfsHelper.
- RemovelfsCommonSubExps** Changed by DTHOMPSON at 28-Feb-80 22:51:59 from NEW new routine that's essentially the second half of the old function RemovelfsHelper. This routine performs the AssociativeAndMatching calls that tries to somehow simplify an if expression. This routine uses OR rather than NOT IMP.
- AssociativeAndMatch** Changed by DTHOMPSON at 28-Feb-80 22:52:28 from CEVAL fixed slight bug that caused it to return T rather than TRUE.
- MakeEqv** Changed by DTHOMPSON at 28-Feb-80 22:52:38 from NEW New routine that makes an equivalence operation out of its two args. Like all the MakeOP routines, this one forces right associativity on output.

- MakeOr** Changed by DTHOMPSON at 28-Feb-80 22:53:03 from NEW
New routine that makes an OR operation out of its two arguments. " x OR y " normally substitutes for " NOT x IMP y ". The one case where OR is NOT used is when y is of the form " a IMP z ". Then MakeOr creates " NOT x and a IMP z ", using the tautology " x OR (a IMP z) " = " ((NOT x) and a) IMP z " .
- ReadRestOfLine** Changed by DTHOMPSON at 28-Feb-80 23:18:56 from AFFIRMEXEC
modified to output the prompt-at-left-end-of-line characters, " ~> " , only to the terminal, since they look bad on the transcript.
- getElements** Changed by DTHOMPSON at 28-Feb-80 23:19:15 from NEW
New routine that returns the elements of one of the known names data structures. The first parameter is an object class; the second parameter is which data structure to get the field from (Hidden, Predefined, Reserved, Known) . Default for second parameter NIL is KnownNames.
- getFileName** Changed by DTHOMPSON at 2-Mar-80 22:45:02 from <AFFIRM>CPATCH-35.;6
Modified to allow OUTPUT option! Now quite general. Calling sequence is (getFileName firstTry defaultFileName dontAskUser IO dontTellUser), where firstTry is tried before anything else; If it succeeds (INFILEP or OUTFILEP as is appropriate), the resultant file name is returned. If it fails, then if dontAskUser is non-NIL, then defaultFileName is INFILEP'd or OUTFILEP'd. If it succeeds, the resultant file name is returned, else NIL is returned. If dontAskUser is NIL, then a long GET-JFN call is made, with the default file name provided. If the user provides a file name suitable for input or output as is appropriate, then that name is returned; If the user types <esc>, the default name is used. It works like a charm! If the user types <esc> when there's no default name (as is the case on input for the read, load, readp commands), the system just beeps and awaits a real file name.
- IO is either INPUT, OUTPUT, NIL (= INPUT), or T (= OUTPUT). dontTellUser is either NIL or T, and if NIL will print out a message when firstTry fails to be a valid file name, before trying the user interaction.

getFileNameFromDirectory

Changed by DTHOMPSON at 2-Mar-80 22:47:12 from
<AFFIRM>CPATCH-35.;6
modified to reflect calling sequence change to getFileName:
getFileNameFromDirectory now takes an extra argument, IO, one of
INPUT, OUTPUT, NIL (= INPUT), or T (= OUTPUT).

This makes this routine suitable for generating file names for output
as well as input. This routine knows the file naming conventions of
the system.

saveUserProfile?

Changed by DTHOMPSON at 2-Mar-80 22:47:45 from
<AFFIRM>CPATCH-35.;10
modified to use getFileName to obtain output file name for new
version of user profile file.

GtjfnHelp

Changed by DTHOMPSON at 2-Mar-80 22:47:56 from
<AFFIRM>CPATCH-35.;10
fixed small bug that caused it to think it couldn't get a block for a
long get-jfn call.

getFileNameFromDirectory

Changed by DTHOMPSON at 2-Mar-80 23:22:29 from
<DTHOMPSON>FNIO.;6
Modified (yet again!) to handle files as well as types.

AffirmSave

Changed by DTHOMPSON at 2-Mar-80 23:23:05 from
<AFFIRM>CPATCH-35.;10
Modified to use getFileNameFromDirectory rather than use wired-in
knowledge of file naming conventions.

let

Changed by ERICKSON at 3-Mar-80 17:11:01 from
<AFFIRM>CPATCH-35.;10
Checks that each variable is given at most one value. Used to
accept i=1 and i=1 and i=2! Slightly different messages

AffirmCompile

Changed by DTHOMPSON at 3-Mar-80 18:27:44 from NEW
New routine that oversees the compilation of a file. It takes two parameters, an object class and a list of elements. Each element must be in the object class. The file for each element is written out, if necessary, and then compiled, using the profile entry CompileOption to decide what compiler options to give the LISP compiler (current choices: F or STF).

The routine currently deals with Types and Files. At this point, Types are written out with extension COM, until the needs mechanism can handle the input of files with extensions containing version numbers.

makeFileName

Changed by DTHOMPSON at 3-Mar-80 18:28:53 from AFFIRMEXEC
modified to U-CASE the file name (it should have been doing this all along).

MinimalTypeSpec

Changed by DTHOMPSON at 3-Mar-80 18:29:02 from SPECIFICATION
modified to not explicitly declare a variable and provide the reflexive equality axiom; the TYPE command does this now.

SpecialValueOK?

Changed by DTHOMPSON at 3-Mar-80 18:29:17 from PROFILE
fixed bug that caused it to always return T; should return the OK value, or NIL.

ProcessCommand

Changed by DTHOMPSON at 3-Mar-80 18:29:34 from <AFFIRM>CPATCH-35.;10
modified to process parameters to compile, breaking the atom list into an object and a sequence of elements.

modified call to renumber to supply ALL the parameters provided, not just the first atom.

Modified type command to declare a variable (name controlled by profile entry DummyVarName) of the newly defined type, and then to provide the reflexive equality axiom, using the variable.

renumber

Changed by DTHOMPSON at 3-Mar-80 18:30:23 from AFFIRMEXEC
modified to take a negative number, as an offset from the highest allowable history event number. Thus, if 1000 is the max, "renumber -1;" will set the number to 1000. The way to think of it is the number of events till roll-over (the number 1) is reached. Thus -1 means "one event 'till 1".

RemovelfsFromIf Changed by DTHOMPSON at 4-Mar-80 16:32:57 from
<AFFIRM>CPATCH-35.;11
modified to use two boolean tautologies:

(1) If B1 then (If B2 then X else Y) else Y == If (B1 and B2) then X
else Y; and

(2) If B1 then X else (If B2 then X else Y) == If (B1 or B2) then X
else Y.

ChooseChainingsAndNarrowings

Changed by RBATES at 4-Mar-80 23:38:17 from LOGIC
Fixed a problem with choose. For a while choose didn't do the
funny substitution that searh did, so on recursive calls to choose, it
was quite possible to get different substitutions.

PexecLists

Changed by ERICKSON at 5-Mar-80 16:45:16 from SPECIFICATION
New argument, evenAtoms, forces all expressions to be run thru
interface. Useful for nilary fns.

nodeExpression

Changed by ERICKSON at 5-Mar-80 16:45:25 from AFFIRMEXEC
When reading in a node, if it is being christened, then we insist
that the thing-being-named be given, not by name, but by
expression (and thus be put thru the interface mechanism).

This fixes the bug where theorems which were made of a nilary
definition couldn't be entered (except with explicit null arg lists),
since they were mistaken for node names. We now exclude
"convenient" renaming, as in "apply newname, oldname;", which
nobody used anyway.

GetCommand

Changed by DTHOMPSON at 6-Mar-80 22:29:17 from
<AFFIRM>CPATCH-35.;11
Modified to use the profile entry CommandLineBuffering to decide
whether to defeat line buffering.

The default is to now wait for carriage return to process a
command.

DWIMUSERFN

Changed by DTHOMPSON at 6-Mar-80 22:29:40 from
<AFFIRM>CPATCH-35.;11
Modified to fix small bugs in return values; The system will now
quietly force the user to either declare the necessary variable or
interface, or abort. The user can attempt as many OK commands as
is wished, but the system's attention never wavers.

augment Changed by DTHOMPSON at 10-Mar-80 16:40:31 from THEOREMPROVER
modified to call Removelfs with second parameter T, thus ensuring the returned "pretty version" is in terms of NOT and IMP rather than OR.

ErrorHeading Changed by DTHOMPSON at 10-Mar-80 16:40:46 from SUFFICIENT
modified to call Removelfs, rather than RemovelfsQ.

ExpandDefs Changed by DTHOMPSON at 10-Mar-80 16:40:51 from TEDIT
modified to call Removelfs, rather than RemovelfsQ.

getPrettyNorm Changed by DTHOMPSON at 10-Mar-80 16:40:59 from THEOREMPROVER
modified to call Removelfs, rather than RemovelfsQ.

listOneRule Changed by DTHOMPSON at 10-Mar-80 16:41:04 from FORMULAIO
modified to call Removelfs, rather than RemovelfsQ.

PrettyPrint Changed by DTHOMPSON at 10-Mar-80 16:41:09 from FORMULAIO
modified to call Removelfs, rather than RemovelfsQ.

redo Changed by DTHOMPSON at 10-Mar-80 16:41:13 from <AFFIRM>CPATCH-35.;11
modified to output (to the transcript only) the fixed command line(s) about to be performed, after return from the editor.

Removelfs Changed by DTHOMPSON at 10-Mar-80 16:41:31 from <AFFIRM>CPATCH-35.;11
modified to handle Qexpressions. Also modified to take a second parameter, needImpForm, which if T will cause the user profile UseOrInProps to be over-ridden for this call; the result will be in terms of NOT and IMP rather than OR.

RemovelfsQ Changed by DTHOMPSON at 10-Mar-80 16:41:55 from LOGIC
Deleted.

replaceCommand Changed by DTHOMPSON at 10-Mar-80 16:41:58 from THEOREMPROVER
modified to call Removelfs with second parameter T, thus ensuring it gets the NOT/IMP form rather than the OR form.

replaceCommand Changed by ERICKSON at 10-Mar-80 16:48:41 from <DTHOMPSON>RRFIX.;6
Bugfix: checks that the current proposition is a Qexpression.

TypeFile Changed by RBATES at 10-Mar-80 21:53:34 from UTILITY
Fixed TypeFile so that it can print a file that is already open and restore the file to its previous state after the function is done.

AffirmInitAfterMakesys
Changed by RBATES at 10-Mar-80 22:32:16 from
<AFFIRM>CPATCH-35.;11
Fixed a problem on tops-20 with backspacing switching from tops-20 to tenex after hitting a control-d when break access is off. The fix was to call the function ENTERVALQT instead of eval'ing the forms on RESETFORMS.

Removelfs Changed by DTHOMPSON at 12-Mar-80 22:20:03 from
<AFFIRM>CPATCH-35.;12
fixed silly bug.

AffirmCompile Changed by DTHOMPSON at 12-Mar-80 22:20:08 from
<AFFIRM>CPATCH-35.;12
removed all the save-the-buffers nonsense, now the compiler gets its compile options using LISPXUNREAD, the same way as Interlisp does it.

complete Changed by ERICKSON at 13-Mar-80 16:00:29 from
THEOREMPROVER
Bugfixes: 1. New format RuleList 2. tE used to give wrong result.
Changes: new form of Removelfs, better treatment for conclusions of the form not(&), uses EQVOP instead of EQOP for rules.

AffirmBreak Changed by ERICKSON at 13-Mar-80 16:16:41 from UTILITY
Comments. We assume that someplace else disables tB, tH if appropriate.

AssumedAndDenied Changed by RBATES at 13-Mar-80 21:50:00 from NEW

This little chart summarizes what knowledge about integers that was added. If we have a statement (if p then trueBranch else falseBranch), we first assume p and go down the true branch with following information.

p	assumed	denied
$i < j$	$i < j, i \leq j$	$j \leq i, j < i, i = j$
$i \leq j$	$i \leq j$	$j < i$
$i = j$	$i = j, i \leq j, j \leq i$	$i < j, j < i$

Then we assume P is false and go down the false branch:

p	assumed	denied
$i < j$	$j \leq i$	$i < j$
$i \leq j$	$j < i, j \leq i$	$i = j, i \leq j, i < j$
$i = j$		$i = j$

The function AssumedAndDenied creates both charts at once. It passes back the charts as one record (assumedTrue deniedTrue assumedFalse deniedFalse). assumedTrue is the items you may assume on the True branch (i.e. return True), deniedTrue is the items you may assume to be false, etc.

IfThenElse

Changed by RBATES at 13-Mar-80 21:50:05 from CEVAL
Modify to use the new function AssumedAndDenied.

IfThenElse1

Changed by RBATES at 13-Mar-80 21:50:12 from CEVAL
Modify to use the new function AssumedAndDenied. Also checks if the predicate p has been changed to true or false if reeval is true.

falseBranch

Changed by RBATES at 13-Mar-80 21:50:38 from CEVAL
Modify to use AssumedAndDenied.

trueBranch

Changed by RBATES at 13-Mar-80 21:50:50 from CEVAL
Modify to use AssumedAndDenied.

AffirmSysoutInit

Changed by RBATES at 13-Mar-80 21:51:32 from
<AFFIRM>CPATCH-35.;12
If BreakAccess is off the control-b and control-h will act as any other character.

cases

Changed by ERICKSON at 20-Mar-80 22:13:53 from
THEOREMPROVER
Ever since the changes to Assumed/Denied, the "cases" command, when applied to a pure predicate (eg, not embedded in an IfThenElse), gave a result which wouldn't normalize properly. (The top-level operator, when migrated down, was not wrapped in an IfThenElse.) Now calls TopLevelIf first.

Changes to version 34

These functions have changed:

- AffirmBreak** Changed by ERICKSON at 24-Nov-79 17:46:31 from UTILITY
Checks for 'GO besides 'TRACE for permissible access when BreakAccess=Off. This fixes a bug in Tracing
- PatternSubs** Changed by ERICKSON at 9-Dec-79 23:42:44 from REWRITERULE
Comments
- CompileRuleIntoLisp** Changed by ERICKSON at 9-Dec-79 23:43:15 from REWRITERULE
Comments, cosmetic
- Qexpression** Changed by ERICKSON at 9-Dec-79 23:43:30 from LOGIC
Now EVALs each freevar instead of doing EVALV. When Qex was on RHS of a rule, freevars might be of the form (CADR formalargument) ; in this case, EVALV did the wrong thing. This change slows AFFIRM down by about 1.5%; we could speed this with a special fast macro which does EVALV for litatoms, and EVAL for all else.
- unfinishedAncestors** Changed by ERICKSON at 9-Dec-79 23:45:48 from TREE
Fixed to seek siblings; this should eliminate the need for two next's
- CheckForQexpression**
Changed by ERICKSON at 9-Dec-79 23:46:04 from LOGIC
Uses AffirmError
- cases** Changed by ERICKSON at 9-Dec-79 23:46:11 from
THEOREMPROVER
CheckForQexpression
- addRuleDirection** Changed by ERICKSON at 9-Dec-79 23:46:31 from LOGIC
The user response Accept has been changed to Instead, to conform with the manual
- addRuleCannot** Changed by ERICKSON at 9-Dec-79 23:46:42 from LOGIC
user response is Instead, not Accept
- let** Changed by DTHOMPSON at 10-Dec-79 21:44:17 from
THEOREMPROVER
Modified to fix printout error that printed " NIL" in the middle of output line. (minor fix, no functionality change)
- CleanupRequest** Changed by RBATES at 10-Dec-79 21:50:41 from REQUEST
Now stores the comments for a particular version from the oldest comment to the newest comment.

WhatChanged Changed by RBATES at 10-Dec-79 21:51:00 from REQUEST
Added a new parameter called Scribe. If Scribe is true then WhatChanged produces a file that can be run threw SCRIBE. An user still might have to edit this file by hand to remove extra carriage returns.

printChanged Changed by RBATES at 10-Dec-79 21:51:38 from REQUEST
extended to place Scribe command on the output file, See WhatChanged.

printChanged1 Changed by RBATES at 10-Dec-79 21:51:59 from REQUEST
Extended to place Scribe commands on the output file. See WhatChanged.

CallEditor Changed by RBATES at 11-Dec-79 22:10:52 from NEW
This function is an generalize call to any text editor . If the function knows anything about the editor it will try to do some of the work for you. Currently it knows about XED and SOS . Given that the user wants XED this function can call XED , given a particular file , and have XED load the file , without the user having to do anything . When the user is finished with XED , he just doesa Exit command and system will do what every is approbate with the new file . If user does an Quit command the function returns ABORTED . This calling sequence is just like the one Hermes does. The calling sequence for SOS is simular except the user will have to remember to strip line numbers is he is suppose to create a new file or do a quit if he not suppose to create a file (such as the review command) . If the function does not know anything about the particular editor the user want , the function tells the user what file to edit . This function takes 4 parameters , Input Output Editor and Question . Input is either String , List or Litatom . If Input is either an String or an List then a temp file is created and String or List is written on it . If Input is an LitAtom then this should be a file . Output is either FILE , LIST or STRING , which is what to return to the caller . Editor is the editor to call SUBSYS with, if not supplied it uses profile entry TextEditor for the editor . If the the Editor is not XED , then Question is used by AskUser to see if the user wants to return the update object . There is default question if one is not supplied . This function is being used by the review command , the fix command and CleanupFunction .

- CallSubsys** Changed by RBATES at 11-Dec-79 22:16:52 from NEW
This is a function that is more generalized call sequence than SUBSYS . It has the options of loading up the AC's on an inferior fork , starting the program at any entry point . This function will also put the parameter File , JFN is ac1 . This is the basic work horse for CallEditor and gripe .
- ChooseChainingsAndNarrowings**
Changed by RBATES at 11-Dec-79 22:18:42 from LOGIC
Fixed a problem with choose that cause an infinite loop in this function.
- CloseDribble** Changed by RBATES at 11-Dec-79 22:19:00 from UTILITY
This function now calls CallEditor, to choose which editor the user wants to look at the transcript with, during the review command.
- FtpFile** Changed by RBATES at 11-Dec-79 22:19:26 from UTILITY
This function now has 2 more parameters Compute and HomeMachine. If Compute is true then the function returns which files have to be Ftp'ed without actual moving them. HomeMachine is the machine that Ftp'ing is coming from, If NIL it uses the variable HOMEMACHINE, which is currently set to ISIC.
- MakeCaseTest** Changed by RBATES at 11-Dec-79 22:20:30 from VCGEN
Fixed a problem with VCGEN created N'ary OR's when the system can only handle binary OR's.
- TryChainingsAndNarrowings**
Changed by RBATES at 11-Dec-79 22:20:51 from LOGIC
Finally fixed Search command so it won't loop. The problem was in an recursive call.
- UpdateAffirm** Changed by RBATES at 11-Dec-79 22:21:10 from UTILITY
Did some general cleanup of the function. It now has two more parameters Compute and HomeMachine, which are passed to FtpFile.
- UserEdit** Changed by RBATES at 11-Dec-79 22:21:35 from NEW
This function is the interface between the fix command and CallEditor. It create the temp file for CallEditor and prettyprint a list on to it. It returns a new list. For the time being it is also being used by the request package, but this call will be removed.
- getComment** Changed by RBATES at 11-Dec-79 22:22:23 from REQUEST
Calls UserEdit thus CallEditor to gather comments about what has changed. The reading back still does not kept carriage returns, but this will be fixed.

gripe	Changed by RBATES at 11-Dec-79 22:22:49 from AFFIRMEXEC Now calls CallSubsys to do the special call of Sndmsg.
GenId	Changed by ERICKSON at 11-Dec-79 22:43:02 from REWRITERULE Commented
CompileRuleIntoLisp	Changed by ERICKSON at 11-Dec-79 22:43:18 from <ERICKSON>RULES.;2 Broken up, so it now calls computeLispCode
computeLispCode	Changed by ERICKSON at 11-Dec-79 22:43:33 from NEW Called by CompileRuleIntoLisp; computes the pattern test and result
Completer	Changed by ERICKSON at 11-Dec-79 22:43:56 from LOGIC " Affirmed " is printed on the same line as the dots
GenIndex	Changed by RBATES at 12-Dec-79 21:42:55 from UTILITY Fix a minor problem that caused GenIndex to print " font " information on the output file.
checkIfOwn	Changed by RBATES at 13-Dec-79 16:05:08 from REQUEST U-CASE the User name.
WhoOwns	Changed by RBATES at 13-Dec-79 16:05:33 from REQUEST U-CASE the parameter User.
ReleaseFile	Changed by RBATES at 13-Dec-79 16:05:50 from REQUEST U-CASE the parameter User.
AddToFile	Changed by RBATES at 13-Dec-79 16:23:55 from UTILITY Changed (PACK (LIST --)) to (PACK* --]
AffirmMakesys	Changed by RBATES at 13-Dec-79 16:24:16 from UTILITY Changed (PACK (LIST --)) to (PACK* --]
ChooseASymbol	Changed by RBATES at 13-Dec-79 16:24:22 from LOGIC Changed (PACK (LIST --)) to (PACK* --]
Constants	Changed by RBATES at 13-Dec-79 16:24:26 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]
CreatePatchFile	Changed by RBATES at 13-Dec-79 16:24:29 from REQUEST Changed (PACK (LIST --)) to (PACK* --]
DeclareType	Changed by RBATES at 13-Dec-79 16:24:31 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]

ExtendName	Changed by RBATES at 13-Dec-79 16:24:32 from UTILITY Changed (PACK (LIST --)) to (PACK* --]
Functions	Changed by RBATES at 13-Dec-79 16:24:34 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]
GenNewSymbols	Changed by RBATES at 13-Dec-79 16:24:36 from VCGEN Changed (PACK (LIST --)) to (PACK* --] Changed (PACK (LIST --)) to (PACK* --]
Implementation	Changed by RBATES at 13-Dec-79 16:24:38 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]
InsertInterfaces	Changed by RBATES at 13-Dec-79 16:24:40 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]
Macro	Changed by RBATES at 13-Dec-79 16:24:42 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]
MakeBaseName	Changed by RBATES at 13-Dec-79 16:24:45 from VCGEN Changed (PACK (LIST --)) to (PACK* --]
MakeExtension	Changed by RBATES at 13-Dec-79 16:24:47 from UTILITY Changed (PACK (LIST --)) to (PACK* --]
MakeInitialValueSymbols	Changed by RBATES at 13-Dec-79 16:24:49 from VCGEN Changed (PACK (LIST --)) to (PACK* --]
MakeInterfaceRule	Changed by RBATES at 13-Dec-79 16:24:50 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]
NewSymbolFrom	Changed by RBATES at 13-Dec-79 16:24:52 from LOGIC Changed (PACK (LIST --)) to (PACK* --]
NotThisSymbol	Changed by RBATES at 13-Dec-79 16:24:53 from LOGIC Changed (PACK (LIST --)) to (PACK* --]
NoteInterfaces	Changed by RBATES at 13-Dec-79 16:24:55 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]
RemoteTypeOf	Changed by RBATES at 13-Dec-79 16:24:57 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]
Schema	Changed by RBATES at 13-Dec-79 16:24:58 from SPECIFICATION Changed (PACK (LIST --)) to (PACK* --]

Translate1 Changed by RBATES at 13-Dec-79 16:25:00 from SPECIFICATION
Changed (PACK (LIST --)) to (PACK* --]

declareVar Changed by RBATES at 13-Dec-79 16:25:01 from SPECIFICATION
Changed (PACK (LIST --)) to (PACK* --]

keep Changed by RBATES at 13-Dec-79 16:25:03 from THEOREMPROVER
Changed (PACK (LIST --)) to (PACK* --]

FtpFile Changed by RBATES at 13-Dec-79 16:25:16 from
<RBATES>CPAT34.;35
Changed (PACK (LIST --)) to (PACK* --]

Define Changed by ERICKSON at 13-Dec-79 16:30:53 from
SPECIFICATION
Only generates an interface for the definition if NO interface exists
in any type. If generated, notifies the user.

InterfaceDefined Changed by ERICKSON at 13-Dec-79 16:31:55 from NEW
Indicates whether Any interface is known for the operator

addRuleCannot Changed by ERICKSON at 13-Dec-79 16:47:07 from
<ERICKSON>COMPLETER.;3
Oops!

addRuleDirection Changed by ERICKSON at 13-Dec-79 16:47:12 from
<ERICKSON>COMPLETER.;3
Oops!

Transform Changed by ERICKSON at 13-Dec-79 16:47:22 from TREE
Fixed the glitchy message for assumed nodes

LoadUserInitializationFile
Changed by ERICKSON at 13-Dec-79 16:47:39 from AFFIRMEXEC
Load is done under an ERSETQ so the file can ERROR! if it doesn't
want to be loaded

pexec Changed by RBATES at 13-Dec-79 21:51:21 from SPECIFICATION
Changed (APPLY -- (LIST --] to (APPLY* -- --] .

Using Changed by RBATES at 13-Dec-79 21:51:39 from SPECIFICATION
Changed (APPLY -- (LIST --] to (APPLY* -- --] .

ShortenAllAtoms Changed by ERICKSON at 13-Dec-79 23:04:03 from
SPECIFICATION
Defunct; replaced by extended functionality of Shorten

- Shorten** Changed by ERICKSON at 13-Dec-79 23:25:27 from UTILITY
Now will accept either a list or an atom
- DeclareFun** Changed by ERICKSON at 13-Dec-79 23:25:41 from SPECIFICATION
The template expression, ex, may now contain expressions. Their types are used to determine the types of the arguments, and appropriate variable symbols are chosen.
- MakeFunction** Changed by ERICKSON at 13-Dec-79 23:26:39 from REWRITERULE
Comments
- CheckDefs** Changed by RBATES at 14-Dec-79 22:52:58 from TEDIT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .
- ChooseASymbol** Changed by RBATES at 14-Dec-79 22:52:58 from <RBATES>PACK.;
2
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .
- ChooseChainingsAndNarrowings**
Changed by RBATES at 14-Dec-79 22:52:58 from
<RBATES>CPAT34.;35
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .
- CompleteDeps** Changed by RBATES at 14-Dec-79 22:52:58 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .
- CompleteSubs** Changed by RBATES at 14-Dec-79 22:52:58 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .
- Completer** Changed by RBATES at 14-Dec-79 22:52:58 from
<ERICKSON>COMPLETER.;3
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .
- ConcurrentAssignmentSubst**
Changed by RBATES at 14-Dec-79 22:52:58 from VCGEN
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

CreateExpansions Changed by RBATES at 14-Dec-79 22:52:58 from TEDIT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

CreatePatchFile Changed by RBATES at 14-Dec-79 22:52:59 from <RBATES>PACK.;
2
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

DO\NARY\OP Changed by RBATES at 14-Dec-79 22:52:59 from XEVAL
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

DWIMUSERFN Changed by RBATES at 14-Dec-79 22:52:59 from UTILITY
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

DeclareVariables Changed by RBATES at 14-Dec-79 22:52:59 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

DefaultUserProfile Changed by RBATES at 14-Dec-79 22:52:59 from PROFILE
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

DeletableP Changed by RBATES at 14-Dec-79 22:52:59 from TEDIT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

Dok Changed by RBATES at 14-Dec-79 22:52:59 from SUFFICIENT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

ExpandVisibleDefs1 Changed by RBATES at 14-Dec-79 22:52:59 from TEDIT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

GetAnnotation Changed by RBATES at 14-Dec-79 22:52:59 from TREE
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

GetChainTo Changed by RBATES at 14-Dec-79 22:52:59 from TREE
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

Instance Changed by RBATES at 14-Dec-79 22:52:59 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

IsType Changed by RBATES at 14-Dec-79 22:52:59 from SPECIFICATION
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

LeftHandSidesCheck
Changed by RBATES at 14-Dec-79 22:52:59 from SUFFICIENT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

Matcher Changed by RBATES at 14-Dec-79 22:52:59 from REWRITERULE
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

NPrimes Changed by RBATES at 14-Dec-79 22:52:59 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

Nest Changed by RBATES at 14-Dec-79 22:52:59 from SUFFICIENT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

NotThisSymbol Changed by RBATES at 14-Dec-79 22:52:59 from <RBATES>PACK.;
2
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

OccursUsingBindings Changed by RBATES at 14-Dec-79 22:52:59 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

Qreduction Changed by RBATES at 14-Dec-79 22:52:59 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

RemoteTypeOf Changed by RBATES at 14-Dec-79 22:52:59 from <RBATES>PACK.;
2
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

RemoveLeaf Changed by RBATES at 14-Dec-79 22:52:59 from TREE
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

SafeExtensionAxioms

Changed by RBATES at 14-Dec-79 22:52:59 from SUFFICIENT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

SigmaEnd

Changed by RBATES at 14-Dec-79 22:52:59 from INFIXPRINT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

Try

Changed by RBATES at 14-Dec-79 22:52:59 from TREE
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

TryChainingsAndNarrowings

Changed by RBATES at 14-Dec-79 22:52:59 from
<RBATES>CPAT34.;35
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

TypeOf

Changed by RBATES at 14-Dec-79 22:52:59 from SPECIFICATION
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

Unify1

Changed by RBATES at 14-Dec-79 22:52:59 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

UpdateFunction

Changed by RBATES at 14-Dec-79 22:52:59 from REQUEST
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

Using

Changed by RBATES at 14-Dec-79 22:52:59 from
<RBATES>CPAT34.;39
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

VerifyRequest

Changed by RBATES at 14-Dec-79 22:52:59 from REQUEST
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

assocAllProgramUnits

Changed by RBATES at 14-Dec-79 22:52:59 from PARSERHELPER
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and FASSOC .

declareVar Changed by RBATES at 14-Dec-79 22:52:59 from <RBATES>PACK.;
2
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

finds Changed by RBATES at 14-Dec-79 22:52:59 from LOGIC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

genvcs Changed by RBATES at 14-Dec-79 22:52:59 from PASCAL
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

let Changed by RBATES at 14-Dec-79 22:52:59 from
<DTHOMPSON>LETFIX.;1
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

nextUsers Changed by RBATES at 14-Dec-79 22:53:00 from TREE
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

reduceStatement Changed by RBATES at 14-Dec-79 22:53:00 from PARSERHELPER
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

sense Changed by RBATES at 14-Dec-79 22:53:00 from TEDIT
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

split Changed by RBATES at 14-Dec-79 22:53:00 from THEOREMPROVER
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

storage Changed by RBATES at 14-Dec-79 22:53:00 from UTILITY
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

transcript Changed by RBATES at 14-Dec-79 22:53:00 from AFFIRMEXEC
Changed MEMB , LENGTH and ASSOC to FMEMB , FLENGTH and
FASSOC .

VerifyRequest Changed by RBATES at 16-Dec-79 21:50:44 from
<AFFIRM>CPATCH-34.;1
On errors, not prints the file name.

- getEntry** Changed by RBATES at 16-Dec-79 23:31:08 from REQUEST now returns a list only when given a list.
- GenNewSymbols** Changed by ERICKSON at 18-Dec-79 22:59:41 from <AFFIRM>CPATCH-34.;1
Changed RenameAtoms to Shorten.
- RenameAtoms** Changed by ERICKSON at 18-Dec-79 23:03:22 from SPECIFICATION
Comment
- AddCommandToHistory** Changed by DTHOMPSON at 19-Dec-79 16:02:09 from AFFIRMEXEC modified to only save the command if the command file is the terminal; also modified to make semicolon the sole " parameter " to the command.
- AddDeclarations** Changed by DTHOMPSON at 19-Dec-79 16:03:09 from SPECIFICATION
modified to save the parameters only if the command file is the terminal; also fixed a bug that caused the system to save E and implicit E commands (AFFIRM shouldn't do that, LISP should) .
- AddParametersToHistory** Changed by DTHOMPSON at 19-Dec-79 16:03:49 from AFFIRMEXEC modified to save the new declarations in the order received, rather than reverse order. Now listings of declarations will be in order of declaration.
- AffirmBacktrace** Changed by DTHOMPSON at 19-Dec-79 16:04:17 from UTILITY modified to change the routine being searched for on the stack from " ProcessAFFIRMCommand " to " ProcessCommand " .
- AffirmMakesys** Changed by DTHOMPSON at 19-Dec-79 16:04:33 from <AFFIRM>CPATCH-34.;1
modified to add initialization of known names, declaration of BASIS type, some MINFS stuff, and to remove SYSOUT making.
- AppendChar** Changed by DTHOMPSON at 19-Dec-79 16:04:50 from NEW new function that appends a character to an atom, if the atom doesn't already end in the char. Useful for pluralizing, etc. Used in that primitive capacity.
- CloseAnnotation** Changed by DTHOMPSON at 19-Dec-79 16:05:19 from AFFIRMEXEC modified to NOT worry about the command file (preparing for echoing / single stepping stuff) , and to use DPRINTOUT rather than PRINTOUT.

- FitsOnLine** Changed by DTHOMPSON at 19-Dec-79 16:05:46 from NEW
new routine that determines whether an expression can fit in a specified length. Useful for guesstimating before calling the pretty printer, if you want more control over paragraphing, etc. Used in the type listing routines.
- decipherRuleMatchInput** Changed by DTHOMPSON at 19-Dec-79 16:06:21 from NEW
new routine used in the " print parts " pattern match routines. This routine takes the collected input and beats it into shape by splitting it into the three parts PARTS TYPES and LHS (these can be typed in any order).
- DetermineInitialRespellings** Changed by DTHOMPSON at 19-Dec-79 16:13:36 from HELP
fixed a bug that sometimes caused the routine to return an atom rather than a list, contrary to its specs.
- Dtvs** Changed by DTHOMPSON at 19-Dec-79 16:13:56 from AFFIRMEXEC
modified to call the routines that do parameter input, thus separating parameters from processing. Also re-organized top-level NLSETQ stuff to localize the undo-ing to the processing of commands. The history list should now always get the command and its parameters.
- GetArgumentsFromList** Changed by DTHOMPSON at 19-Dec-79 16:20:17 from NEW
new routine that gathers atoms between commas on an input line thus breaking a sequence of atoms into a sequence of parameters, each a sequence of atoms.
- GetCommand** Changed by DTHOMPSON at 19-Dec-79 16:20:59 from NEW
New routine taking the place of ReadCommandParameters. Oversees the input of the parameters to a particular command.
- getDeclarations** Changed by DTHOMPSON at 19-Dec-79 16:21:23 from NEW
new routine that used to be integral to the declarations lister. Now the functions of obtaining the raw list of decls from the type data structure and listing the decls prettily are totally separate. This routine gets the raw decls. It returns an assoc list ((type decls) (type decls) ...)
- getFileName** Changed by DTHOMPSON at 19-Dec-79 16:22:11 from AFFIRMEXEC
modified to replace references to getFileName1 with makeFileName, and to print out a message if the first file tried didn't open, just before calling the interactive file name obtainer, TTYINFILE.

getFileNameFromDirectory

Changed by DTHOMPSON at 19-Dec-79 16:22:45 from NEW
new routine that localizes the file naming conventions assumed in
the needs package. This routine returns wither NIL or the file name
of a file in a specified directory, containing a specified type of
object.

getInfixOps

Changed by DTHOMPSON at 19-Dec-79 16:23:18 from NEW
new routine that returns the infix ops of a specified type.

getInterfaces

Changed by DTHOMPSON at 19-Dec-79 16:23:30 from NEW
new routine that returns the interface declarations of a specified
type.

getOneRuleMatch

Changed by DTHOMPSON at 19-Dec-79 16:23:41 from NEW
new routine that actually performs the match process of all rules in
a specified set of types. This routine is one of those that will have
to be beefed up to handle more complex patterns.

GetParameters

Changed by DTHOMPSON at 19-Dec-79 16:24:05 from NEW
new routine that replaces ReadCommandParameters. Does the
same thing.

getRewriteRules

Changed by DTHOMPSON at 19-Dec-79 16:24:32 from NEW
new routine that localizes the obtaining of a set of rules (used so
far only by the type listing routines).

getRuleMatches

Changed by DTHOMPSON at 19-Dec-79 16:25:24 from NEW
new routine that oversees the pattern matching of a sequence of
patterns, used by the print parts routines.

getViewableElements

Changed by DTHOMPSON at 19-Dec-79 16:25:46 from NEW
new routine that acts as a selve between the system and the
user. It basically returns one of the lists in a field of KnownNames,
for pretty printing by the print known routines, but it removes any
elements we don't want the user to see.

Infix

Changed by DTHOMPSON at 19-Dec-79 16:26:20 from
SPECIFICATION
modified to use the new data structure on the property list of the
type name.

InitializeKnownNames

Changed by DTHOMPSON at 19-Dec-79 16:26:39 from NEW
new routine that initializes the known names data structure.

InitializeLoad	Changed by DTHOMPSON at 19-Dec-79 16:27:03 from SPECIFICATION modified to worry about the compatibility of old saved files with the new handling of infix operators.
initInfix	Changed by DTHOMPSON at 19-Dec-79 16:27:49 from NEW new routine that is only on the COMS of saved type files, and initializes the infix operators.
initNeeds	Changed by DTHOMPSON at 19-Dec-79 16:28:36 from NEW new routine that is only on the COMS of saved type files, and initializes the needs information (and loads the needs) .
listDeclarations	Changed by DTHOMPSON at 19-Dec-79 16:28:43 from FORMULAIO modified to print the declarations across the page instead of down the page.
listInfixOps	Changed by DTHOMPSON at 19-Dec-79 16:29:31 from FORMULAIO modified to use the new data structure for infix ops.
listInterfaces	Changed by DTHOMPSON at 19-Dec-79 16:29:37 from FORMULAIO modified to print the interfaces across the page instead of down the page.
listNeeds	Changed by DTHOMPSON at 19-Dec-79 16:29:50 from FORMULAIO new routine that pretty prints the needs info.
listRewriteRules	Changed by DTHOMPSON at 19-Dec-79 16:30:04 from FORMULAIO modified to call getRewriteRules.
listRuleMatches	Changed by DTHOMPSON at 19-Dec-79 16:30:10 from NEW new routine that lists any rule matches found in the print parts routines.
Loaded?	Changed by DTHOMPSON at 19-Dec-79 16:30:25 from NEW new routine that determines if a file or type is already loaded/defined, and thus needs no further processing (to avoid loops in the needs package) .
loadNeededFiles	Changed by DTHOMPSON at 19-Dec-79 16:30:40 from NEW does just that.
loadNeededTypes	Changed by DTHOMPSON at 19-Dec-79 16:30:43 from NEW does just that; further documentation of the alg forthcoming.

makeExpFromPattern

Changed by DTHOMPSON at 19-Dec-79 16:30:51 from NEW
new routine that computes the original expression from the pattern,
for output purposes.

makeFileName

Changed by DTHOMPSON at 19-Dec-79 16:31:02 from AFFIRMEXEC
modified to do what getFileName1 did before: if the file name is an
atom, INFILEP. if it is a list, attempt to PACKFILENAME, and if
successful, INFILEP. If PACKFILENAME doesn't work, try PACK, and
INFILEP.

makePatterns

Changed by DTHOMPSON at 19-Dec-79 16:31:27 from NEW
new routine that constructs search patterns out of expressions,
for the print parts routines.

needReport

Changed by DTHOMPSON at 19-Dec-79 16:31:41 from NEW
new routine that reports to the user what needs just did with a
file or type. First draft only; I'm not sure what user wants to see
here.

needs

Changed by DTHOMPSON at 19-Dec-79 16:31:55 from FORMULAIO
new routine that processes the needs command.

nodeExpression

Changed by DTHOMPSON at 19-Dec-79 16:32:07 from AFFIRMEXEC
modified to correctly handle the case when it is called with NIL
parameter (syntax error in input line).

OpenAnnotation

Changed by DTHOMPSON at 19-Dec-79 16:32:24 from NEW
new routine that functions similarly to CloseAnnotation, and puts
out the CMD environment commands when we're annotating.

Plural

Changed by DTHOMPSON at 19-Dec-79 16:32:36 from NEW
new routine that pluralizes test strings based on the number of
elements in a list. The programmer can provide the text either
already singular or already plural; the routine matches the list and
the text. " The known names are " ... 1 ele list gets translated to "
The known name is " .

print

Changed by DTHOMPSON at 19-Dec-79 16:33:28 from AFFIRMEXEC
modified to add new features to print: parts, known, IH,
BadEquations.

printCommand?

Changed by DTHOMPSON at 19-Dec-79 16:33:39 from TREE
modified to call printName correctly, once printName was changed.

- PrintArgs** Changed by DTHOMPSON at 19-Dec-79 16:33:48 from NEW new routine that paragraph-prints a sequence of expressions, with a separator (T gets you comma) and a terminator.
- PrintEnd** Changed by DTHOMPSON at 19-Dec-79 16:34:00 from NEW new routine that end the command-parameters input mode by ensuring the output is positioned at the beginning of a new line.
- printHelper** Changed by DTHOMPSON at 19-Dec-79 16:34:16 from FORMULAIO modified to implement the new print features: parts, known, IH, BadEquations.
- printName** Changed by DTHOMPSON at 19-Dec-79 16:34:29 from AFFIRMEXEC modified to actually perform the output to the transcript, rather than build the text and return it.
- PrintPrompt** Changed by DTHOMPSON at 19-Dec-79 16:34:38 from AFFIRMEXEC modified to print " ! " if we're annotating, since the annotation commands will now only go to the transcript.
- ProcessCommand** Changed by DTHOMPSON at 19-Dec-79 16:35:01 from NEW takes the place of ProcessAFFIRMCommand.Minor changes, to delete " ? " and add " help " , etc.
- ProcessCommandAbort** Changed by DTHOMPSON at 19-Dec-79 16:35:10 from NEW new routine that is called only by DtvS, and isolates the old part of DtvS that processed the control-E and ERROR! returns to DtvS from command processing.
- ReadCommandFile** Changed by DTHOMPSON at 19-Dec-79 16:35:31 from NEW new routine that will be further beefed up to handle the single-stepping I/O coming soon.
- ReadRestOfLine** Changed by DTHOMPSON at 19-Dec-79 16:35:47 from AFFIRMEXEC modified to remove the re-positioning of output line to beginning, since that's now PrintEnd's job.
- ReadSpecialCommandParameters** Changed by DTHOMPSON at 19-Dec-79 16:35:59 from AFFIRMEXEC modified to handle implicit e parameter input.
- RestoreTerminalEnvironment** Changed by DTHOMPSON at 19-Dec-79 16:36:15 from AFFIRMEXEC modified to remove the copying of the read table, since it probably isn't needed and is quite expensive.

- redo** Changed by DTHOMPSON at 19-Dec-79 16:36:27 from AFFIRMEXEC modified greatly to be much smarter and cleaner about fixing and redo-ing of commands. LISP commands can now be redone (correctly) , redo, undo, and fix commands cannot be redone, fix command dumps you in the text editor selected by your profile.
- RemoveChar** Changed by DTHOMPSON at 19-Dec-79 16:37:00 from NEW a new routine that removes the final character of an atom (efficiently) , if the character is a specified one. Useful for singularizing most nouns.
- SetupFile** Changed by DTHOMPSON at 19-Dec-79 16:37:19 from SPECIFICATION modified to change where infix ops are kept (now on the property list) , and to add the needs info (also on the property list) .
- VerblnString** Changed by DTHOMPSON at 19-Dec-79 16:37:34 from NEW new routine that finds the verb in a text string for Plural. It currently searches for " is " , " s are " , " are " , in that order.
- DeclareType** Changed by RBATES at 2-Jan-80 23:21:47 from <AFFIRM>CPATCH-34.;4
The new way of doing Generic Interfaces require a small mod to this function.
- GenericInterface** Changed by RBATES at 2-Jan-80 23:22:06 from NEW
This function is doing all the work require to handle Generic Interfaces. It will note if the system can not determine between two interfaces and generate an Askuser call so the user can tell the system which one was right. This function uses the compiler macro NoSpreadApply* which fast way to call an specify function when inside an lambda nospread function (since it does use any conses if the number of arguments are less than an constant) .
- InitDtps** Changed by RBATES at 2-Jan-80 23:24:11 from UTILITY
Inserted some calls to NoteInterfaces that are needed to make the new way of doing generic interfaces work.
- InsertInterfaces** Changed by RBATES at 2-Jan-80 23:24:27 from <AFFIRM>CPATCH-34.;4
Instead of doing packing to determine the name of the generic interface .that. applies, this function now inserts an call to GenericInterface. This saves space and time since atoms and space are not consumed in creating Generic Interface names.

NoteInterfaces Changed by RBATES at 2-Jan-80 23:25:15 from
<AFFIRM>CPATCH-34.;4

Instead of storing the names of specify interfaces on the generic interface function property list, the new method stores the name on the shorten name property list. We don't call NoteInterface any more.

ChooseChainingsAndNarrowings

Changed by RBATES at 2-Jan-80 23:26:09 from
<AFFIRM>CPATCH-34.;4

Cleaned up the code and fixed some bugs. This function should finally work. This function calls let, to do all the work after it has figure out the proper substitution to make.

TryChainingsAndNarrowings

Changed by RBATES at 2-Jan-80 23:26:45 from
<AFFIRM>CPATCH-34.;4

Cleaned up the code and fixed some bugs. This function should finally work. This function calls let, to do all the work after it has figure out the proper substitution to make.

choose

Changed by RBATES at 2-Jan-80 23:26:54 from THEOREMPROVER
Pushed off some of the work choose did to the function let.

let

Changed by RBATES at 2-Jan-80 23:27:07 from
<AFFIRM>CPATCH-34.;4

This function now returns the Transformation that was done to the proof structure. This is so that search and choose can annotate that they were called.

AddDeclarations

Changed by DTHOMPSON at 3-Jan-80 16:23:40 from
<AFFIRM>CPATCH-34.;4

modified to call AddNeeds, so that all added declarations get represented in the implicit needs.

AddNeeds

Changed by DTHOMPSON at 3-Jan-80 16:23:57 from NEW

A new routine that simply stores a sequence of elements in the appropriate part of the needs data structure. The routine is called with an object, a typename, and a list of elements.

CheckForType

Changed by DTHOMPSON at 3-Jan-80 16:24:27 from AFFIRMEXEC

Modified to ask the user if AFFIRM should go off hunting for undefined types, or dummy them to the minimal specification.

decipherRuleMatchInput

Changed by DTHOMPSON at 3-Jan-80 16:24:46 from
<AFFIRM>CPATCH-34.;4
modified to use a debug switch -- for my convenience.

declareVar

Changed by DTHOMPSON at 3-Jan-80 16:25:20 from
<AFFIRM>CPATCH-34.;4
modified to call CheckForType telling it to ensure the type is
specified if it is currently undefined.

getFileNameFromDirectory

Changed by DTHOMPSON at 3-Jan-80 16:27:34 from
<AFFIRM>CPATCH-34.;4

getViewableElements

Changed by DTHOMPSON at 3-Jan-80 16:27:46 from
<AFFIRM>CPATCH-34.;4
modified to avoid synonyms in spelling lists in AFFIRMObjects.

Loaded?

Changed by DTHOMPSON at 3-Jan-80 16:27:57 from
<AFFIRM>CPATCH-34.;4
not modified.

loadNeededFiles

Changed by DTHOMPSON at 3-Jan-80 16:28:59 from
<AFFIRM>CPATCH-34.;4
not modified.

loadNeededTypes

Changed by DTHOMPSON at 3-Jan-80 16:29:04 from
<AFFIRM>CPATCH-34.;4
not modified.

MinimalTypeSpec

Changed by DTHOMPSON at 3-Jan-80 16:29:06 from NEW
new routine that defines the minimal type specification for its
parameter.

needs

Changed by DTHOMPSON at 3-Jan-80 16:29:12 from
<AFFIRM>CPATCH-34.;4
modified to use AddNeeds.

PopTypeStack

Changed by DTHOMPSON at 3-Jan-80 16:29:17 from NEW
new routine that implements the end command, and is used by the
needs processing.

PrettyPrintCommand Changed by DTHOMPSON at 3-Jan-80 16:29:24 from NEW
new routine that pretty prints one command to a file .

redo Changed by DTHOMPSON at 3-Jan-80 16:29:33 from
<AFFIRM>CPATCH-34.;4
modified to pretty print the command when redoing it.

UserEdit Changed by DTHOMPSON at 3-Jan-80 16:29:44 from
<AFFIRM>CPATCH-34.;4
modified to use prettyprintcommand rather than internal code.

SetupFile Changed by RBATES at 7-Jan-80 16:08:10 from
<AFFIRM>CPATCH-34.;4
Removed anything that had to do with Generic Interfaces since
generic interfaces have been re-done.

CreatePatchFile Changed by RBATES at 7-Jan-80 16:08:35 from
<AFFIRM>CPATCH-34.;5
Fix a problem with the call to CleanupFunction. There is still a
problem with this call, the way that I compute what functions to
release is wrong.

DeclareType Changed by DTHOMPSON at 7-Jan-80 21:54:24 from
<RBATES>GINTERFACE.;22
modified to set Infix and Needs property list values to NIL upon
creation of a new type. (also resets them to NIL upon redefinition
of the type) . Note that this still doesn't solve the loaded type
redefinition problem.

GetAFFIRMCommand Changed by DTHOMPSON at 7-Jan-80 21:57:10 from AFFIRMEXEC
DELETED. Replaced by GetCommand (basically just renamed) .

getFileName1 Changed by DTHOMPSON at 7-Jan-80 21:57:24 from AFFIRMEXEC
DELETED. Subsumed by getFileName, makeFileName.

ReadCommandParameters
Changed by DTHOMPSON at 7-Jan-80 21:57:30 from AFFIRMEXEC
DELETED. Replaced by GetParameters (basically just renamed) .

ProcessAFFIRMCommand
Changed by DTHOMPSON at 7-Jan-80 21:57:39 from AFFIRMEXEC
DELETED. Replaced by ProcessCommand (basically just renamed) .

MissingECommand Changed by DTHOMPSON at 7-Jan-80 21:57:45 from AFFIRMEXEC
DELETED. Subsumed by ProcessCommand.

needReport Changed by DTHOMPSON at 7-Jan-80 22:01:10 from
<AFFIRM>CPATCH-34.;5
modified to not output anything when the message is " type
already loaded. "

CheckLoad Changed by RBATES at 8-Jan-80 21:49:07 from UTILITY
CheckLoad now calls DeclareType to make sure any side effects of previous loaded types are undone. CheckLoad has a extra argument of the typename. If the arugment is not supplied the function tries to compute it.

DeclareType Changed by RBATES at 8-Jan-80 21:49:55 from <DTHOMPSON>FIXUP.;17
DeclareType has a new argument DontRedeclareComs, which if True then DeclareType won't set the COMS of the typename to NIL. This is used by CheckLoad when reading in DataTypes stored as InterLisp files.

SetupFile Changed by RBATES at 8-Jan-80 21:50:54 from <RBATES>PATCH.;2
The call that SetupFile creates to CheckLoad passes the typename along.

AffirmError Changed by ERICKSON at 9-Jan-80 22:52:39 from UTILITY
Changed the messages to be less verbose. Now says " Recoverable " , " User " , or " Affirm internal " error; internal errors say " Affirm may be in an unsound state " .

CallSubsys Changed by RBATES at 9-Jan-80 22:54:20 from <AFFIRM>CPATCH-34.;6
Fixed a problem with GETBLK so it won't break CallSubsys if GETBLK can not find a free page and does an error.

declareMacro Changed by RBATES at 9-Jan-80 23:52:55 from SPECIFICATION
removed extra calls to reduceExpression.

AddRule Changed by ERICKSON at 10-Jan-80 16:35:30 from LOGIC
New format of RuleList. CompileRuleIntoLisp now handles properties

ApplyRules Changed by ERICKSON at 10-Jan-80 16:35:46 from REWRITERULE
New format RuleList

Axiom Changed by ERICKSON at 10-Jan-80 16:35:55 from NEW
Used to be called Rule. Handles axioms and lemmas. Takes a legal rule, checked by ruleSeqParse

CallEDITF Changed by ERICKSON at 10-Jan-80 16:36:07 from UTILITY
Complains if EDITF gives an error

CompileRuleIntoLisp Changed by ERICKSON at 10-Jan-80 16:36:17 from
<ERICKSON>RULES.;3
New format of lhs properties. CRIL now sets them up. New
parameter: dontInteract. Unless true, CRIL will create the
OccursLHSides properties, used for interactions. dontInteract is set
for interfaces, defns

ConvertOldType Changed by ERICKSON at 10-Jan-80 16:39:32 from NEW
Makes old data types compatible with the new format for lhs
properties. Takes a type name.

DeclareFun Changed by ERICKSON at 10-Jan-80 16:39:41 from
<AFFIRM>CPATCH-34.;1
Was computing the EqualOp, but saving it on the interface. Now
properly saved on property of the operator. Also new arg to
CompileRuleIntoLisp

Define Changed by ERICKSON at 10-Jan-80 16:39:49 from
<AFFIRM>CPATCH-34.;1
new arg to CompileRuleIntoLisp

Extension Changed by ERICKSON at 10-Jan-80 16:39:55 from UTILITY
New argument to ask for the last extension only

GenId Changed by ERICKSON at 10-Jan-80 16:40:29 from
<ERICKSON>RULES.;3
New format of property

GetLHSide Changed by ERICKSON at 10-Jan-80 16:40:36 from NEW
New function: given a function name and id, returns the left-hand
side

InitializeLoad Changed by ERICKSON at 10-Jan-80 16:40:43 from
<AFFIRM>CPATCH-34.;4
Calls ConvertOldType for files with the old lhs properties (as
determined by AFFIRMVERSION)

NoteLeftHandSides Changed by ERICKSON at 10-Jan-80 16:40:59 from REWRITERULE
New format lhs props

Operators Changed by ERICKSON at 10-Jan-80 16:41:07 from
THEOREMPROVER
Now returns no_duplicates

- ProcessCommand** Changed by ERICKSON at 10-Jan-80 16:41:16 from <AFFIRM>CPATCH-34.;4
New args to ruleSeqParse. Also removed reduceExpression calls per Ray's change
- RemoveRule** Changed by ERICKSON at 10-Jan-80 16:41:26 from REWRITERULE
New lhs, RuleList formats
- Report** Changed by ERICKSON at 10-Jan-80 16:41:38 from REWRITERULE
New property formats. Comments. Faster check for ignore, fixes bug where operator in ignore was unchecked
- Rule** Changed by ERICKSON at 10-Jan-80 16:41:42 from LOGIC
New function occupying an old name (old fn is now Axiom) . Given a lhs, returns the rule. Computes the proper EqualOp, except interfaces just use EQOP.
- Rules** Changed by ERICKSON at 10-Jan-80 16:41:53 from REWRITERULE
New format lhs props
- RulesThatMightInteract**
Changed by ERICKSON at 10-Jan-80 16:41:58 from REWRITERULE
Uses the new LHS formats to reduce the number of candidates. In the SetSequence example, reduced to 30%. Has comments describing the new format
- Schema** Changed by ERICKSON at 10-Jan-80 16:42:12 from <RBATES>PACK.;2
Provides interface only if none are known for the short name in any type
- SecondaryOperators** Changed by ERICKSON at 10-Jan-80 16:42:20 from NEW
Computes all operators different from the primary one
- SetupFile** Changed by ERICKSON at 10-Jan-80 16:42:25 from <AFFIRM>CPATCH-34.;6
Only saves certain properties for axioms and interfaces. Has hook to omit equality operator for certain builtin types
- SimplifyRule** Changed by ERICKSON at 10-Jan-80 16:42:32 from REWRITERULE
New format RuleList
- TypeOfExpression** Changed by ERICKSON at 10-Jan-80 16:42:37 from NEW
Uses interface mechanism to compute the type of a short expression

ZapRule	Changed by ERICKSON at 10-Jan-80 16:42:48 from REWRITERULE New property formats. id may be omitted or T. Checks for missing, etc
computeLispCode	Changed by ERICKSON at 10-Jan-80 16:42:52 from <AFFIRM>CPATCH-34.;1 Checks for too many arguments in rule
discard	Changed by ERICKSON at 10-Jan-80 16:43:02 from SPECIFICATION Gives error if ZapRule doesn't hit
employ	Changed by ERICKSON at 10-Jan-80 16:43:15 from THEOREMPROVER New arg to ZapRule. Prop is now an axiom instead of a rule
operators1	Changed by ERICKSON at 10-Jan-80 16:43:21 from NEW Secondary to Operators
pexec	Changed by ERICKSON at 10-Jan-80 16:43:26 from <AFFIRM>CPATCH-34.;1 New arg: notNIL. Will AffirmError on interface error, rather than return NIL.
ruleSeqParse	Changed by ERICKSON at 10-Jan-80 16:43:31 from UTILITY Now does the checking that rules have EQOP, calls Axiom,Schema, or Define with a valid equation. No longer passed the function to call, it decides based on rule kind.
reduceExpression	Changed by RBATES at 10-Jan-80 23:12:29 from <AFFIRM>CPATCH-34.;7 Extended reduceExpression to handle ruleSeq, variableDecl and functionDecl. With this change Affirm should only call reduceExpression threw the function parse.
AddNeeds	Changed by DTHOMPSON at 13-Jan-80 23:15:04 from <AFFIRM>CPATCH-34.;7 modified to fix bug -- it used to expect a list of elements as its second parameter; now it ensures it is a list.
SpellingSynonym	Changed by DTHOMPSON at 13-Jan-80 23:15:33 from NEW new routine that checks to see if item (its first parameter) is contained in itemList (its second parameter) , either as an atom (MEMB) or as a synonym. Returns the item or synonym spelling.

AFFIRMSpellingCorrect

Changed by DTHOMPSON at 13-Jan-80 23:15:57 from HELP modified to handle synonyms properly, by calling SpellingSynonym, and by being prepared for synonyms occurring in spelling lists when it is creating ASKUSER key lists from spelling lists.

ReduceRespellingsInteractively

Changed by DTHOMPSON at 13-Jan-80 23:16:16 from HELP modified to handle synonyms correctly.

ReduceRespellingsNonInteractively

Changed by DTHOMPSON at 13-Jan-80 23:16:26 from HELP modified to handle synonyms correctly.

getViewableElements

Changed by DTHOMPSON at 13-Jan-80 23:16:33 from <AFFIRM>CPATCH-34.;7 modified to handle synonyms in spelling lists, so that the spelling list can also be viewed by the user.

ProcessCommand

Changed by DTHOMPSON at 13-Jan-80 23:16:53 from <AFFIRM>CPATCH-34.;7 modified to simplify the keys of the SELECTQ, removing synonym spellings, keeping only the basic key. Thus, " axioms " is translated to " axiom " by the spelling corrector via synonyms, and ProcessCommand only expects " axiom " . Also modified to cause interface declarations to add the type of the declared interfaces to the implicit needs data base, and to cause the type to be searched for by the needs mechanism if the type isn't defined.

CreatePatchFile

Changed by RBATES at 14-Jan-80 16:18:00 from <AFFIRM>CPATCH-34.;7 Fixed a bug that made this function put duplicate entries on the patch file.

RemoveRule

Changed by ERICKSON at 14-Jan-80 16:57:46 from <AFFIRM>CPATCH-34.;7 Returns kind of the old rule. (Calls it an axiom if on RuleList)

Completer

Changed by ERICKSON at 14-Jan-80 16:58:14 from <AFFIRM>CPATCH-34.;7 Bugfix: when simplifying a rule on Unchecked, used to call the new rule an axiom. Now computes type of the old rule. Also, changed to use RuleTypes.

ZapRule Changed by ERICKSON at 14-Jan-80 16:58:27 from
<AFFIRM>CPATCH-34.;7

Sets the new global ZapKind to the type of the deleted rule

CompileRuleIntoLisp Changed by ERICKSON at 15-Jan-80 23:39:28 from
<AFFIRM>CPATCH-34.;11

Stores the PrimaryLHSides property in chronological order

RulesThatMightInteract

Changed by ERICKSON at 15-Jan-80 23:40:14 from
<AFFIRM>CPATCH-34.;11

Uses the profile entry KBaxiomOrder to decide in what order to interact the existing axioms with a rule that's just been pulled off Unchecked. The default is the old method, Inverse (the most recent axioms first) .

Changes to version 33

These files have changed:

SUFFICIENT Changed by BAKER at 11-Nov-79 23:52:23 from
<AFFIRM>SUFFICIENT.;10

The sufficient completeness checker has been modified so that a function may be specified via a define or a schema command rather than in the axioms. The function sufficient? has been deleted as it is no longer needed because of changes that David Thompson has made.

These functions have changed:

CheckLoad Changed by ERICKSON at 30-Oct-79 16:00:06 from UTILITY
Changed the messages for files created under a different Affirm version or Sysout.

AscendBy Changed by ERICKSON at 31-Oct-79 16:00:49 from TREE
Fixed a bug where it rose 1 less than specified.

resume Changed by ERICKSON at 31-Oct-79 16:01:03 from TREE
Fixed double printing.

Transform Changed by ERICKSON at 31-Oct-79 16:01:10 from TREE
Different messages for circularity; keeps record of known arc labels

Try Changed by ERICKSON at 31-Oct-79 16:01:29 from TREE
When an orphan node is tried, it is made a theorem (and a message printed)

ClearNames Changed by ERICKSON at 31-Oct-79 16:02:34 from TREE
KnownNames:Nodes

SetName Changed by ERICKSON at 31-Oct-79 16:02:44 from TREE
maintains KnownNames:Nodes

ClearProof Changed by ERICKSON at 31-Oct-79 16:03:01 from TREE
clears KnownNames:Arcs

AddRule Changed by DTHOMPSON at 31-Oct-79 23:14:02 from
<DTHOMPSON>LOGFIX30.;9
modified*to cleanup user interaction in AKUSER calls, and to pretty-up the output formats. Also the internal code organization was modified for source code readability by bubbling internal PROGs up to the top and removing some expression-oriented code in favor of statement-oriented code.

Completer Changed by DTHOMPSON at 31-Oct-79 23:14:32 from <DTHOMPSON>LOGFIX30.;9 modified to clean up the output formats, and to call AffirmError rather than ERROR!.

RemoveRule Changed by DTHOMPSON at 31-Oct-79 23:14:41 from <DTHOMPSON>LOGFIX30.;9 modified to clean up the output formats a bit.

transcript Changed by DTHOMPSON at 1-Nov-79 21:47:46 from AFFIRMEXEC modified to NOT do its own input, and to pretty up a few messages.

FreeVars Changed by ERICKSON at 1-Nov-79 22:26:19 from LOGIC Comment

declareVar Changed by RBATES at 1-Nov-79 23:11:26 from SPECIFICATION Duplicate declarations are now being ignored. If the user is trying to redeclare a variable, the system prints a message and the user is asked if he really means to redeclare the variable. If the user answers yes, the system goes ahead and does it. The biggest problem with answering yes, appears that printing out the type doesn't work correctly, since you have 2 instances of a variable each with a different type.

genvars Changed by DTHOMPSON at 1-Nov-79 23:45:16 from PASCAL modified to NOT do its own input. It now expects a list of unlnames (or misspellings thereof), with commas already extracted out.

augment Changed by DTHOMPSON at 1-Nov-79 23:46:09 from THEOREMPROVER. modified to NOT do its own input. It now expects an expression that's already been parsed and type-checked.

suppose Changed by DTHOMPSON at 1-Nov-79 23:48:22 from THEOREMPROVER modified to NOT do its own input. It now expects an expression that's already been parsed and type-checked.

use Changed by DTHOMPSON at 1-Nov-79 23:49:49 from THEOREMPROVER modified to NOT do its own input. It now expects a first parameter that's an expressionSeq that's already been type-checked, and named, if necessary. The second parameter is as always: T=this is an apply command, NIL=this is a use command.

AddRule Changed by ERICKSON at 4-Nov-79 22:56:25 from <DTHOMPSON>LOGFIX30.;9
Modified to call addRuleDirection. Uses EQVOP instead of EQOP for Treat. Some changes in its logic; see addRuleDirection. Notifies user if a RuleReadIn simplifies to TRUE.

addRuleDirection Changed by ERICKSON at 4-Nov-79 22:56:59 from NEW
Auxiliary to AddRule, determines the proper treatment for a rule, possibly asking user. If a rule is impermissible, gives the user a reason. Logic change: If rule direction is mandated by variable sets, still checks for left unifications, to prevent looping. Now asks the proper question if var sets forbid a rule.

addRuleCannot Changed by ERICKSON at 4-Nov-79 22:57:59 from NEW
auxiliary to addRuleDirection; handles user interaction in all cases where a rule is forbidden.

genvcs Changed by ERICKSON at 4-Nov-79 22:58:42 from <DTHOMPSON>EARLYCLEAN.;1
VC children of program " unitname " are now automatically given names, such as " unitname#1 ", " unitname#2 " , etc. The computes lemma is only printed and named if it isn't TRUE. Messages changed accordingly.

printAnnotation? Changed by ERICKSON at 4-Nov-79 23:00:08 from TREE
change args.

printProofNode Changed by ERICKSON at 4-Nov-79 23:00:24 from TREE

CleanupRequest Changed by RBATES at 4-Nov-79 23:19:53 from REQUEST
Now calls requestCommentToFile to " compress " comments. The output file is in the variable REQUESTCOMMENTS.

TTYINFILE Changed by RBATES at 4-Nov-79 23:20:13 from UTILITY
Now uses the new compiler macro Dprintout, so that the dribble file now contains the name of the file returned by TTYINFILE. Only prompt of the message will also be on the dribble file.

transcript Changed by RBATES at 4-Nov-79 23:21:01 from <DTHOMPSON>FIXEDCMD5.;12
The transcript you'll get when starting in Affirm will go to the LOGIN directory.

MakeBinaryLevels Changed by RBATES at 4-Nov-79 23:21:19 from INFIXPRINT
Fixed a problem with printing interface error messages caused by extra NIL.

INFIX\PRINT3 Changed by RBATES at 4-Nov-79 23:21:30 from INFIXPRINT
Does not call DeCanonicalize anymore.

CompactPropStorage
Changed by RBATES at 4-Nov-79 23:21:35 from NEW
The function that compacts PropStorage using the variable EqConsFlg. The flag indicates after adding the new propositions to PropStorage, that EqCons should be called on the last EqConsFlg worth of propositions.

CallEDITF Changed by RBATES at 4-Nov-79 23:22:07 from UTILITY
Now does error checking to make sure that the function about to be edited meets some minimal requirements. (1) The function contains \ and (2) the function is either EXPR or CEXPR. This change prevents users from editing IfThenElse and other hand coded functions in Affirm.

AffirmNews Changed by RBATES at 4-Nov-79 23:22:38 from AFFIRMEXEC
Made more robust in case it can open the file for write. If it can't open the file for write , it tries for read, if that fails it returns aborted.

UpdateAffirm Changed by RBATES at 4-Nov-79 23:22:59 from UTILITY
Made the function more robust in case of error dealing with not being able to open a file for write.

seekChainTo Changed by ERICKSON at 4-Nov-79 23:23:12 from TREE
Bugfix

ReadUserProfileFile Changed by RBATES at 4-Nov-79 23:23:12 from AFFIRMEXEC
Made the function more robust in case of error dealing with not being able to open a file for write.

GetChainTo Changed by ERICKSON at 4-Nov-79 23:23:24 from TREE
Bugfix

Try Changed by ERICKSON at 4-Nov-79 23:23:33 from
<ERICKSON>KNOWN.;7
Bug fix for random node under current theorem

MakeLevels Changed by RBATES at 4-Nov-79 23:23:22 from INFIXPRINT
Now handles system operators that have more than 2 parameters.
This happens on interface errors.

LtReplace Changed by RBATES at 4-Nov-79 23:23:46 from INFIXPRINT
Uses the XEVAL names instead of the I/O names since this is being called during normalization and not printing.

TTYOUTFILE	Changed by RBATES at 4-Nov-79 23:23:57 from UTILITY Uses the new compiler macro Dprintout.
MakeCurrent	Changed by ERICKSON at 4-Nov-79 23:24:06 from TREE When the cursor lands on a node, any annotation is printed.
SigmaEnd	Changed by RBATES at 4-Nov-79 23:24:04 from INFIXPRINT Uses the I/O operators instead of the XEVAL ones.
printPropn	Changed by ERICKSON at 4-Nov-79 23:24:14 from TREE Prints the annotation, if any
BINXEVAL	Changed by RBATES at 4-Nov-79 23:24:10 from UTILITY This function now calls DeCanonicalize, which means that during normalization the DeCanonicalize is happening and not during printing
INFIX\PRINT	Changed by RBATES at 4-Nov-79 23:24:28 from INFIXPRINT Does not call DeCanonicalize anymore.
DecodeName	Changed by ERICKSON at 4-Nov-79 23:24:30 from TREE Spelling corrects names
TranslateTo#	Changed by RBATES at 4-Nov-79 23:24:32 from FORMULAIO Calls the new function CompactPropStorage.
UpdateStatus	Changed by ERICKSON at 4-Nov-79 23:24:39 from TREE Lists remaining lemmas upon which a theorem depends
FtpFile	Changed by RBATES at 4-Nov-79 23:24:41 from UTILITY Fixed some problems dealing with errors when trying to FTP.
unUpdateFunction	Changed by RBATES at 4-Nov-79 23:24:52 from REQUEST Does some error checking to make sure that the function is ok to unUpdate.
AffirmBreak	Changed by ERICKSON at 4-Nov-79 23:25:35 from NEW Error handler: sits on BREAKRESETFORMS and either permits break or suppresses, calling AffirmBacktrace

DprintoutMacro Changed by RBATES at 4-Nov-79 23:25:02 from NEW
This function does implements the compiler macro Dprinout. The macro Dprintout does the same thing as a printout expect there is no DRIBBLE file, What was the DRIBBLE file is the primary output file, and of course everything gets restored. So (printout T .F3.3 i) will just print on the terminal, while (printout NIL .F3.3 i) will just print on the dribble file without showing up on the terminal. This function is very handy for sneaking things to the dribble file. It does actual close the DRIBBLE file, so there is no problem about losing access to the file.

AffirmBacktrace Changed by ERICKSON at 4-Nov-79 23:25:57 from NEW
Prints a diagnostic backtrace. Skips over uninteresting caller, stops at ProcessAffirmCommand. Limits trace to depth 15 (unless Interlisp error, when limit is 5)

INFIX\PRINT4 Changed by RBATES at 4-Nov-79 23:26:17 from INFIXPRINT
Does not call DeCanonicalize anymore.

UpdateAffirm Changed by RBATES at 4-Nov-79 23:26:43 from <RBATES>CPAT32.;28
Uses the variable FilesToUpdate to update files that are not on FULLSYSTEMFILES. This variable contains files like PGU, DATABASE, etc.

AffirmError Changed by ERICKSON at 4-Nov-79 23:30:20 from UTILITY
=T Gives category-specific messages, unless quietflg=T or no parms supplied. Calls AffirmBacktrace for internal errors.

Arc Changed by ERICKSON at 4-Nov-79 23:53:31 from TREE
Spelling correction on arc names

GetChild Changed by ERICKSON at 4-Nov-79 23:53:44 from TREE
Spelling correct arc names

TopLevelIf Changed by ERICKSON at 5-Nov-79 16:10:34 from NEW
Given an expression, ensures that it has an IFOP on top (possibly under a QOP) . Fixes the normalization bug where simple theorems did not check Assumed/Denied.

use Changed by ERICKSON at 5-Nov-79 16:11:09 from <DTHOMPSON>EARLYCLEAN.;1
Calls TopLevelIf on the lemma

augment Changed by ERICKSON at 5-Nov-79 16:11:20 from <DTHOMPSON>EARLYCLEAN.;1
Calls TopLevelIf on resultant conclusions.

suppose Changed by ERICKSON at 5-Nov-79 16:17:43 from
<DTHOMPSON>EARLYCLEAN.;1
Calls TopLevelIf on current propn

AddCommandToHistory

Changed by DTHOMPSON at 5-Nov-79 18:16:40 from NEW
new function that stores a command and its uninterpreted (not
checked, just a list of atoms) parameters on the history list. there
are basically three categorizations: (1) lisp commands, e,
ImplicitE: command = e, parameters are whatever (NOTE: see note
in ProcessAFFIRMCommand) (2) commands which do their own
input: ProcessAFFIRMCommand puts the command on the list by
calling this routine with NIL for the parameters. The individual
routine is responsible for putting its parameters on the history list
by calling this routine AGAIN. (3) normal everyday commands. the
command, the parameters, AND the command terminator ';' are put
on the history list. (if the routine of category2 reads to semicolon,
then it must append semi on the end of its param list when it calls
this routine.)

CloseAnnotation

Changed by DTHOMPSON at 5-Nov-79 18:18:15 from AFFIRMEXEC
modified to delete the second parameter. Now just takes one
parame'er, the command file. (The number of diverse places this
routine was called has been cut down drastically.)

DefinedAFFIRMCommand

Changed by DTHOMPSON at 5-Nov-79 18:18:31 from NEW
new routine that returns T if its parameter is an AFFIRM command,
which it determines by looking for the property " AFFIRMCommand "
on the property list of the atom.

ReadCommandParameters

Changed by DTHOMPSON at 5-Nov-79 18:18:53 from NEW
new routine that reads in the parameters for most all commands. It
divides commands into 3 categories: (1) normal -- read to
semicolon. (2) own-read -- the command function does its own
input. (3) special -- the command function doesn't do its own, but
a simple read to semi won't suffice. Call
ReadSpecialCommandParameters to do it.

ReadSpecialCommandParameters

Changed by DTHOMPSON at 5-Nov-79 18:19:28 from NEW
new routine that reads in the parameters for a small number of
commands that require special processing. For example, the " ; "
command doesn't read any at all. The " " command needs to worry
about putting out a second " " if we're annotating, BEFORE we skip
to semicolon. ETC.

ReadRestOfLine

Changed by DTHOMPSON at 5-Nov-79 18:19:52 from AFFIRMEXEC
modified to prompt the user at each carriage return while reading
atoms to semicolon from the terminal. Reading from files is as
before.

ProcessAFFIRMCommand

Changed by DTHOMPSON at 5-Nov-79 18:20:09 from AFFIRMEXEC
greatly modified! new way of reading params, adding command and
params to history list, and greatly expanded the command name
SELECTQ to contain EVERY AFFIRM command.

AffirmSave

Changed by DTHOMPSON at 5-Nov-79 18:20:44 from AFFIRMEXEC
modified to NOT do its own input. Now expects a file name and a "
method " , either slow, fast, or NIL, which causes it to use the
profile entry save method.

PrintDecis

Changed by DTHOMPSON at 5-Nov-79 18:21:01 from
SPECIFICATION
I don't remember! maybe wasn't modified. (duh..)

ReadExpression

Changed by DTHOMPSON at 5-Nov-79 18:21:11 from FORMULAIO
modified to NOT do its own input. Whoops! It's rather late at nite...
let's try again: modified to NOT recurse.

ReadExpressionList Changed by DTHOMPSON at 5-Nov-79 18:22:41 from FORMULAIO
renamed the parameters and added a global comment.

declareVar

Changed by DTHOMPSON at 5-Nov-79 18:22:50 from
<RBATES>CPAT32.;26
modified to NOT do its own input. parameters are now id, type,
internalCall. id is a list of short-form identifiers, type is the type
name the ids are to be declared, and internalCall is NIL if this call
originated from the user typing the declare command, and is T if
this call originated from the vc generator.

nodeExpression Changed by DTHOMPSON at 5-Nov-79 18:23:21 from NEW modified to NOT do its own input. Now an already parsed expression sequence. Still returns the last expression, and still interprets the first expression as a name to associate with the node structure the second is built into.

parse Changed by DTHOMPSON at 5-Nov-79 18:23:43 from FORMULAIO cleaned up a bit and renamed its parameters, added a comment.

replaceCommand Changed by DTHOMPSON at 5-Nov-79 18:23:56 from THEOREMPROVER modified to NOT do its own input. Now expects an expression sequence already type-checked. NOTE: still uses ReplaceList as global to routines ApplAllEqHyps, ApplyEqHyp.

ruleSeqParse Changed by DTHOMPSON at 5-Nov-79 18:24:37 from UTILITY modified to NOT do its own input. Now expects a rule sequence, and does the reduce expression stuff, and then APPLYS Rule or Define or Schema to the result.

printHelper Changed by DTHOMPSON at 5-Nov-79 18:24:56 from NEW new routine which is a modified version of print1. (print1 disappears.) all modifications were to output formats.

setupDeclarations Changed by DTHOMPSON at 5-Nov-79 18:25:11 from PASCAL modified to call declareVar correctly, given the new parameter setup for declareVar.

Dtvs Changed by DTHOMPSON at 5-Nov-79 18:25:26 from AFFIRMEXEC modified to call CloseAnnotation correctly, given that the latter's calling sequence just changed.

LetError Changed by DTHOMPSON at 5-Nov-79 18:25:50 from THEOREMPROVER DELETED. Subsumed by let, AffirmError.

ReadRest Changed by DTHOMPSON at 5-Nov-79 18:25:56 from AFFIRMEXEC DELETED. Subsumed by ReadCommandParameters, AddCommandToHistory.

annotate Changed by DTHOMPSON at 5-Nov-79 18:26:58 from TREE modified to NOT do its own input. Actually, DELETED. Subsumed into ProcessAFFIRMCommand.

apply Changed by DTHOMPSON at 5-Nov-79 18:27:16 from THEOREMPROVER DELETED. Subsumed into ProcessAFFIRMCommand.

assume	Changed by DTHOMPSON at 5-Nov-79 18:27:24 from THEOREMPROVER DELETED. Subsumed by ProcessAFFIRMCommand.
clear	Changed by DTHOMPSON at 5-Nov-79 18:27:30 from THEOREMPROVER DELETED. Subsumed by ProcessAFFIRMCommand.
copy	Changed by DTHOMPSON at 5-Nov-79 18:27:36 from AFFIRMEXEC DELETED. Subsumed by ProcessAFFIRMCommand.
declareFun	Changed by DTHOMPSON at 5-Nov-79 18:27:42 from SPECIFICATION DELETED. Subsumed into ProcessAFFIRMCommand.
define	Changed by DTHOMPSON at 5-Nov-79 18:27:47 from SPECIFICATION DELETED. Subsumed by ProcassAFFIRMCommand.
fix	Changed by DTHOMPSON at 5-Nov-79 18:27:58 from AFFIRMEXEC DELETED. Subsumed by ProcessAFFIRMCommand.
infix	Changed by DTHOMPSON at 5-Nov-79 18:28:03 from SPECIFICATION DELETED. Subsumed by ProcessAFFIRMCommand.
normalize	Changed by DTHOMPSON at 5-Nov-79 18:28:07 from THEOREMPROVER DELETED. Subsumed by ProcessAFFIRMCommand.
print1	Changed by DTHOMPSON at 5-Nov-79 18:28:16 from AFFIRMEXEC DELETED. Subsumed by ProcessAFFIRMCommand.
put	Changed by DTHOMPSON at 5-Nov-79 18:28:22 from THEOREMPROVER DELETED. Subsumed by ProcessAFFIRMCommand.
quit	Changed by DTHOMPSON at 5-Nov-79 18:28:27 from UTILITY DELETED. Subsmmed by ProcassAFFIRMCommand.
readNodeExpression	Changed by DTHOMPSON at 5-Nov-79 18:28:31 from TREE DELETED. Subsumed by nodeExpression, ProcessAFFIRMCommand.
rule	Changed by DTHOMPSON at 5-Nov-79 18:28:42 from LOGIC DELETED. subsumed b ProcessAFFIRMCommand, ruleSeq parse.

schema	Changed by DTHOMPSON at 5-Nov-79 18:28:48 from SPECIFICATION DELETED. Subsumed by ProcessAFFIRMCommand.
show	Changed by DTHOMPSON at 5-Nov-79 18:28:53 from SPECIFICATION DELETED. limbo commnd.
sufficient?	Changed by DTHOMPSON at 5-Nov-79 18:28:57 from SUFFICIENT DELETED. Subsumed by ProcessAFFIRMCommand.
try	Changed by DTHOMPSON at 5-Nov-79 18:29:04 from THEOREMPROVER DELETED. Subsumed by ProcessAFFIRMCommand.
turn	Changed by DTHOMPSON at 5-Nov-79 18:29:09 from AFFIRMEXEC DELETED. no longer a command.
type	Changed by DTHOMPSON at 5-Nov-79 18:29:13 from PARSER DELETED. Subsumed by ProcessAFFIRMCommand.
types	Changed by DTHOMPSON at 5-Nov-79 18:29:18 from SPECIFICATION DELETED. Subsumed by ProcessAFFIRMCommand.
undo	Changed by DTHOMPSON at 5-Nov-79 18:29:22 from AFFIRMEXEC DELETED. Subsumed by ProcessAFFIRMCommand.
AffirmRATOMS	Changed by DTHOMPSON at 5-Nov-79 18:29:48 from AFFIRMEXEC DELETED. No longer needed.
ListRules	Changed by DTHOMPSON at 5-Nov-79 18:29:51 from SPECIFICATION DELETED. Subsumed by ListTypeParts.
AffirmLoad	Changed by DTHOMPSON at 5-Nov-79 18:30:07 from AFFIRMEXEC modified to use AffirmError, not print its own error msg.
LoadUserInitializationFile	Changed by DTHOMPSON at 5-Nov-79 18:30:19 from NEW new routine that loads a file at sys startup, if the file exists. The file name is obtained from the user profile entry userInitializationFileName.
AffirmInitAfterMakesys	Changed by DTHOMPSON at 5-Nov-79 18:30:33 from UTILITY modified to call LoadUserInitializationFile as its last act before starting AFFIRM.

MissingECommand Changed by DTHOMPSON at 5-Nov-79 18:31:01 from AFFIRMEXEC not really modified.

MissingECommand? Changed by DTHOMPSON at 5-Nov-79 18:31:05 from AFFIRMEXEC modified to ensure the command file is the terminal.

redo Changed by DTHOMPSON at 5-Nov-79 18:31:15 from AFFIRMEXEC modified to not do its own input, and to be more robust, and to give better msgs when the event can't be found or there's nothing to redo.

adopt Changed by DTHOMPSON at 5-Nov-79 18:31:44 from SPECIFICATION modified to NOT do its own input. Now expects a type name.

affirmed? Changed by DTHOMPSON at 5-Nov-79 18:32:06 from LOGIC modified to NOT do its own input. Now takes no params.

arc Changed by DTHOMPSON at 5-Nov-79 18:32:12 from TREE modified to NOT do its own input. Now expects an arc label.

cases Changed by DTHOMPSON at 5-Nov-79 18:32:41 from THEOREMPROVER modified to NOT do its own input. now takes no params.

choose Changed by DTHOMPSON at 5-Nov-79 18:32:47 from THEOREMPROVER modified to NOT do its own input. now expects a list of integers gt 0.0

complete Changed by DTHOMPSON at 5-Nov-79 18:33:09 from THEOREMPROVER modified to NOT do its own input. now expects just a retrycom param, NIL from ProcessAFFIRMCommand.

discard Changed by DTHOMPSON at 5-Nov-79 18:33:23 from SPECIFICATION modified to NOT do its own input. Now expects a rule lhs (an expression).

down Changed by DTHOMPSON at 5-Nov-79 18:33:40 from TREE modified to NOT do its own input. Now expects either NIL or the label of the child.

employ Changed by DTHOMPSON at 5-Nov-79 18:33:56 from THEOREMPROVER modified to NOT do lws own input. now expects an expression.

enter	Changed by DTHOMPSON at 5-Nov-79 18:34:03 from THEOREMPROVER modified to NOT do its own input. now expects a list of group names.
exec	Changed by DTHOMPSON at 5-Nov-79 18:34:15 from UTILITY modified to NOT do its own input. now takes no params.
forget	Changed by DTHOMPSON at 5-Nov-79 18:34:21 from UTILITY modified to NOT do its own input. now takes no params.
gripe	Changed by DTHOMPSON at 5-Nov-79 18:34:27 from AFFIRMEXEC modified to NOT do its own input. now expects a subject, a string of less than 36 characters.
invoke	Changed by DTHOMPSON at 5-Nov-79 18:34:42 from THEOREMPROVER modified to NOT do its own input. now expects a list of refs t definitions.
keep	Changed by DTHOMPSON at 5-Nov-79 18:34:59 from THEOREMPROVER modified to NOT do its own input. now expects a group name, followed by a list of group names or prop names or prop numbers.
let	Changed by DTHOMPSON at 5-Nov-79 18:35:12 from THEOREMPROVER modified to NOT do its own input. now expects a list of substitutions (equations) , and a flag that says T if this is a put, NIL if this is a let.
monitor	Changed by DTHOMPSON at 5-Nov-79 18:35:36 from NEW a dummy routine until I get it finished.
name	Changed by DTHOMPSON at 5-Nov-79 18:35:43 from TREE modified to NT do its own input. now expects a name followed by a thing to name (bot' expressions) .
needs	Changed by DTHOMPSON at 5-Nov-79 18:36:01 from FORMULAIO modified to NOT do its own input. still a dummy routine! expects a list of type names.
next	Changed by DTHOMPSON at 5-Nov-79 18:36:10 from TREE modified to NOT do its own input. now takes no params.

print Changed by DTHOMPSON at 5-Nov-79 18:36:18 from AFFIRMEXEC modified to handle spelling correction on key words in the NON-interactive mode, and now calls printHelper rather than print1. output formats were modified. does NOT do its own input. Expects a list of atoms it tries to interpret by keyword.

profile Changed by DTHOMPSON at 5-Nov-79 18:36:44 from AFFIRMEXEC modified to NO do its own input. Noe expects a list of atoms it will attempt to form into transactions.

readp Changed by DTHOMPSON at 5-Nov-79 18:36:58 from PASCAL modified to NOT do its own filename input. now expects a file name. Still reads the file, however!

renumber Changed by DTHOMPSON at 5-Nov-79 18:37:10 from AFFIRMEXEC modified to NOT do its own input. now expects an integer between 1 and 1000; NIL == 1;

resume Changed by DTHOMPSON at 5-Nov-79 18:37:20 from <ERICKSON>KNOWN.;7 modified to NOT do its own input. now takes no params.

search Changed by DTHOMPSON at 5-Nov-79 18:37:26 from THEOREMPROVER modified to NOT do its own input. now takes no params.

set Changed by DTHOMPSON at 5-Nov-79 18:37:32 from SPECIFICATION modified to NOT do its own input. now expects a var and an exp.

split Changed by DTHOMPSON at 5-Nov-79 18:37:40 from THEOREMPROVER modified to NOT do its on input. now takes no params∞

storage Changed by DTHOMPSON at 5-Nov-79 18:37:48 from UTILITY modified to use user'rofile rather than directly modify history size, and no longer dower its own input. Now expects a state, one of (normal, tight, severe).

theorem Changed by DTHOMPSON at 5-Nov-79 18:38:07 from TREE modified to NOT do its own input. expects a node (expression) . Any naming has already been filtered off and performed.

up Changed by DTHOMPSON at 5-Nov-79 18:38:26 from TREE modified to NOT do its own input. expects an integer (I think) .

ProcessAFFIRMCommand

Changed by ERICKSON at 5-Nov-79 22:58:57 from
<AFFIRM>CPATCH-32.;4
Modified " discard " syntax

discard

Changed by ERICKSON at 5-Nov-79 22:59:06 from
<AFFIRM>CPATCH-32.;4
New syntax: " 'discard 'LHS <lefthandside> ' ; " . Will tolerate old
syntax

AddCommandToHistory

Changed by DTHOMPSON at 6-Nov-79 16:20:10 from
<AFFIRM>CPATCH-32.;4
modified to delete the third parameter, and to use HISTORYSAVE
rather than modifying LISPXHIST directly.

Define

Changed by DTHOMPSON at 6-Nov-79 16:20:52 from
SPECIFICATION
modified to use AffirmError rather than ERROR! and to produce more
informative error messages.

Dtvs

Changed by DTHOMPSON at 6-Nov-79 16:21:10 from
<AFFIRM>CPATCH-32.;4
modified to not call HistorySave, that's done later. Modified to not
check AnnotationOpen, that's CloseAnnotation's job. modified to
move printBells inside printout " (... command aborted.) "

ReadRestOfLine

Changed by DTHOMPSON at 6-Nov-79 16:23:06 from
<AFFIRM>CPATCH-32.;4
modified to ensure the output line position is at left margin after
command parameters have been read.

Rule

Changed by DTHOMPSON at 6-Nov-79 16:23:19 from LOGIC
modified to use AffirmError rather than ERROR!, and to produce more
informative error messages.

Schema

Changed by DTHOMPSON at 6-Nov-79 16:23:30 from
SPECIFICATION
modified to use AffirmError rather than ERROE!, and to produce more
informative error messages.

arc

Changed by DTHOMPSON at 6-Nov-79 16:23:37 from
<AFFIRM>CPATCH-32.;4
modified to remove some more parameter checking, which was
moved to ProcessAFFIRMCommand.

choose Changed by DTHOMPSON at 6-Nov-79 16:23:50 from
<AFFIRM>CPATCH-32.;4
modified to remove some more parameter checking, which was
moved to ProcessAFFIRMCommand.

retry Changed by DTHOMPSON at 6-Nov-79 16:23:57 from TREE
modified to NOT do its own input. Now takes no params.

PexecLists Changed by DTHOMPSON at 6-Nov-79 16:24:04 from
SPECIFICATION
modified to use AffirmError rather than ERROR#.

ProcessAFFIRMCommand
Changed by DTHOMPSON at 6-Nov-79 16:24:09 from
<ERICKSON>PATCH.;4
modified to do some more input checking for some command
functions, and the command entries in the SELECTQ were (finally!)
sorted by command name.

ReadUserProfileFile Changed by ERICKSON at 6-Nov-79 16:34:31 from
<AFFIRM>CPATCH-32.;4
bugfix: misspelling

listRewriteRules Changed by DTHOMPSON at 6-Nov-79 16:39:36 from FORMULAIO
modified to output " rulelemma " for " lemma " .

limboCommand Changed by DTHOMPSON at 6-Nov-79 16:39:42 from NEW
new routine to cover our rears. When anybody runs the impl,
program, precondition, etc., commands, they get a long-winded
message saying we didn't realize anybody was using the
commands, but if they send a message to me (dht) they'll get the
command back...

PrintPrompt Changed by DTHOMPSON at 6-Nov-79 17:09:09 from AFFIRMEXEC
modified to re-add the stuff that prints out a message when the
transcript file is not open. This got mysteriously deleted, somehow.

transcript Changed by DTHOMPSON at 6-Nov-79 17:20:08 from
<RBATES>CPAT32.;29
modified to clean up error message a bit, and to use profile entry
TranscriptFileName instead of atom AFFIRMTRANSCRIPT for body
name. (Default value for this profile entry is AFFIRMTRANSCRIPT) .

ProcessAFFIRMCommand

Changed by DTHOMPSON at 6-Nov-79 22:09:32 from
<ERICKSON>PATCH.;5
modified to remove bug from section reading parameters for the
rule command.

Define

Changed by DTHOMPSON at 6-Nov-79 22:09:50 from
<AFFIRM>CPATCH-32.;5
modified to fix bug in call to expression printer.

Schema

Changed by DTHOMPSON at 6-Nov-79 22:09:58 from
<AFFIRM>CPATCH-32.;5
modified to fix bug in calling expression printer.

TypeFile

Changed by DTHOMPSON at 6-Nov-79 22:10:05 from UTILITY
modified to remove parameter to AffirmError.

DTVS

Changed by DTHOMPSON at 6-Nov-79 22:10:12 from AFFIRMEXEC
modified to remove parameter to AffirmError.

IfThenElse\BUILTIN\Interface

Changed by MUSSER at 6-Nov-79 22:52:30 from BUILTIN
When an expression " If p then q else r " is input where q and r of
type Boolean, this interface checking function now translates this
to (IfThenElse p (IfThenElse q TRUE FALSE) (IfThenElse r TRUE
FALSE)) rather than just (IfThenElse p q r) . This change makes
things consistent with the changes made to IfThenElse when the "
new equality " treatment was introduced.

employ

Changed by ERICKSON at 6-Nov-79 23:47:43 from
<AFFIRM>CPATCH-32.;6
Message change for unproven case

PrintPrompt

Changed by ERICKSON at 7-Nov-79 23:31:28 from
<AFFIRM>CPATCH-32.;6
Correct the event number to compensate for the fact that
HISTORYSAVE is done after prompting

AddCommandToHistory

Changed by DTHOMPSON at 7-Nov-79 23:35:16 from
<AFFIRM>CPATCH-32.;6
modified to just store the command name; the parameters are not
yet known when this routine is called.

AddParametersToHistory

Changed by DTHOMPSON at 7-Nov-79 23:35:53 from NEW
new routine that adds a command's parameters to the history
event already set aside for the command.

Dtvs

Changed by DTHOMPSON at 7-Nov-79 23:37:20 from
<AFFIRM>CPATCH-32.;6
modified to call AddCommandToHistory as soon as the command
word has been recognized by GetAFFIRMCommand.

ProcessAFFIRMCommand

Changed by DTHOMPSON at 7-Nov-79 23:37:37 from
<AFFIRM>CPATCH-32.;6
modified to call AddParameters to History rather than
AddCommandToHistory (just a name change, no functionality).

CleanupFunction

Changed by RBATES at 7-Nov-79 23:41:34 from REQUEST
This is a new version that fixes a problem with mulitple places that
the patch file came from.

CreatePatchFile

Changed by RBATES at 8-Nov-79 16:01:51 from REQUEST
Fixed a problem with function that are already on the Master Patch
file.

askWhereToGo

Changed by RBATES at 8-Nov-79 16:02:19 from NEW
A new function that given a list of files uses ASKUSER to return the
file which the user want the patch file from. Only useful is there
are many patchs files and the Request Package can't figure out
which is the right patch file.

Transform

Changed by ERICKSON at 8-Nov-79 17:48:09 from
<AFFIRM>CPATCH-32.;7
Circularity message

CircularChildP

Changed by ERICKSON at 8-Nov-79 17:48:20 from TREE
Comments; faster circularity test

CircularTransformP

Changed by ERICKSON at 8-Nov-79 17:48:29 from TREE
Fixed test for circular lemma use

Normalize

Changed by ERICKSON at 8-Nov-79 17:54:09 from
THEOREMPROVER
Different message to suggest " cases "

RemoveChildren1

Changed by ERICKSON at 9-Nov-79 16:34:44 from TREE
Undoability

Next Changed by ERICKSON at 9-Nov-79 16:37:02 from TREE
Notices if the current theorem is assumed

use Changed by ERICKSON at 9-Nov-79 16:41:08 from
<AFFIRM>CPATCH-32.;7
Cute message for unnamed lemmas

ClearNames Changed by ERICKSON at 9-Nov-79 16:55:16 from
<AFFIRM>CPATCH-32.;7
Uses KnownNames:Nodes to find names to clear. Bugfix.

printHelper Changed by ERICKSON at 11-Nov-79 23:39:41 from
<AFFIRM>CPATCH-32.;10
Fixed key for 'variables to match caller

parenthesize Changed by RBATES at 12-Nov-79 16:09:53 from FORMULAIO
fixed a problem that happen when parenthesize is called with
something that isn't a LIST.

printAnnotation? Changed by ERICKSON at 15-Nov-79 16:37:36 from
<AFFIRM>CPATCH-32.;13
Uses Printpara for prettier output

Annotate Changed by ERICKSON at 15-Nov-79 16:37:56 from TREE
Changed args: No longer insists that target transformation be
descendant from any node in particular

ChooseChainingsAndNarrowings
Changed by ERICKSON at 15-Nov-79 16:38:06 from LOGIC
Annotates, showing the command really used

EditTheorem Changed by ERICKSON at 15-Nov-79 16:38:14 from TEDIT
Allows the user to summarize what she did; comment can be in the
command line, or asked for after finished. Also, changed logic for
STOP

EnhanceHp Changed by ERICKSON at 15-Nov-79 16:38:33 from UTILITY
Uses Dprintout so escape characters go to terminal only

ProcessAFFIRMCommand
Changed by ERICKSON at 15-Nov-79 16:38:41 from
<AFFIRM>CPATCH-32.;13
Changed calls for Annotate, EditTheorem

TransformToTrue Changed by ERICKSON at 15-Nov-79 16:38:46 from TREE
changed args to Annotate

TryChainingsAndNarrowings

Changed by ERICKSON at 15-Nov-79 16:38:53 from LOGIC
Annotates to record the command really used

genvcs

Changed by ERICKSON at 15-Nov-79 16:38:58 from
<AFFIRM>CPATCH-32.;13
changed args to Annotate

retry

Changed by ERICKSON at 15-Nov-79 16:39:02 from
<AFFIRM>CPATCH-32.;13
Normalizes

set

Changed by ERICKSON at 15-Nov-79 16:39:05 from
<AFFIRM>CPATCH-32.;13
Undoable

AffirmSORT

Changed by DTHOMPSON at 19-Nov-79 16:17:35 from NEW
new outline that takes the place of INTERLISP's SORT. If called with
list, or list and second parameter T, simply calls INTERLISP's SORT
routine, renamed to InterLispSort. If the second parameter is
UPPER, sorts the list ignoring uppercase distinctions.

Changes to version 31

These files have changed:

TREE Changed by ERICKSON at 26-Oct-79 00:52:48 from
<ERICKSON>TREE.;88
Replaces file Proofstructure. Changes the organization of the proof
tree, designating certain propositions as " theorems " .

These functions have changed:

PrintNews Changed by RBATES at 23-Oct-79 00:40:30 from AFFIRMEXEC
Fixed a typo in a string.

UpdateAffirm Changed by RBATES at 23-Oct-79 00:40:43 from UTILITY
Fixed a bug that prevented the function from working.

gripe Changed by RBATES at 23-Oct-79 00:40:50 from AFFIRMEXEC
Made all the ASKUSER calls require confirmation. Also fixed a
problem with EVALV not quoting its argument.

Dtvs Changed by DTHOMPSON at 24-Oct-79 23:45:51 from AFFIRMEXEC
modified to printout message " (... <command> aborted) " after
control-E or other error.

GetAFFIRMCommand Changed by DTHOMPSON at 24-Oct-79 23:46:14 from AFFIRMEXEC
modified to turn line buffering back on for all command's
parameters, UNLESS the user profile entry CommandLineBuffering is
ON AND the command is in the UnBufferedCommands list. This way,
normal users won't get hassled by no backup for certain commands
parameters. Note that the line buffering is STILL OFF FOR COMMAND
NAMES. So a semicolon immediately after a command name needs
no carriage return. the E command will still fire immediately.

Unexpected Changed by DTHOMPSON at 24-Oct-79 23:46:56 from UTILITY
cleaned up a bit to use FillOut and read easier. All internal,
shouldn't be noticed by any callers or users.

EstablishInterLispEnvironment

Changed by DTHOMPSON at 24-Oct-79 23:47:09 from AFFIRMEXEC
modified to set line delete message to normal lisp default: " ##<cr>
" , after the message has possible been reset by the line buffering
stuff.

UpdateLineDeleteMessage

Changed by DTHOMPSON at 24-Oct-79 23:47:30 from NEW
the routine which actually resets the line delete message. Called with one parameter, one of {command, parameters, lisp}, and sets line delete message accordingly. Presently, command and lisp are treated the same: normal LISP line delete message, " ##<cr> ". The parameters line delete message is " < ", cr, " ~> ". This way, users will see that they haven't deleted the COMMAND NAME when they have gotten by it.

FillOut

Changed by DTHOMPSON at 24-Oct-79 23:50:29 from NEW
new routine which takes two lists and one fill element. It return the first list, possibly extended with the fill element to be the same length as the second list. The second list can optionally be a FIXP length. cons

/DREMASSOC

Changed by ERICKSON at 24-Oct-79 23:58:21 from NEW
Removes all members of list which begin with specified key. A low level utility; destructive, undoable.

ADDTOLIST

Changed by ERICKSON at 24-Oct-79 23:59:02 from NEW
Like " push ", but may be undone out of order. Arguments are evaluated, as in /SET.

DROPFROMLIST

Changed by ERICKSON at 24-Oct-79 23:59:18 from NEW
Used to undo ADDTOLIST

EndinColon

Changed by ERICKSON at 24-Oct-79 23:59:22 from NEW
Predicate: does this atom end in " : " ?

EndsColon

Changed by ERICKSON at 24-Oct-79 23:59:31 from NEW
If given a literal atom, ensures that it ends in " : ", using PACK*

EnhanceHp

Changed by ERICKSON at 24-Oct-79 23:59:41 from NEW
Sends the terminal an escape sequence to trigger display enhancement features.

EqCons

Changed by ERICKSON at 24-Oct-79 23:59:56 from NEW
Ray's simple routine to maximize sharing within an expression argument.

EqCons1

Changed by ERICKSON at 25-Oct-79 00:00:09 from NEW

GetExpression

Changed by ERICKSON at 25-Oct-79 00:00:10 from NEW
Returns a proposition, given a prop #.

- GetProp#** Changed by ERICKSON at 25-Oct-79 00:00:26 from NEW
Given an expression, returns the prop#. Creates a node if it didn't already exist.
- MakeQexpressions** Changed by ERICKSON at 25-Oct-79 00:00:38 from NEW
Given a list of expressions, makes sure each one is a Qexpression or TRUE.
- Normalize** Changed by ERICKSON at 25-Oct-79 00:00:56 from NEW
Normalizes an expression, prints it out, checks for case analysis. Used to be called CevalHelper.
- POS** Changed by ERICKSON at 25-Oct-79 00:01:15 from NEW
Utility: Returns the location of an element in a list.
- PexecLists** Changed by ERICKSON at 25-Oct-79 00:01:22 from NEW
Used to translate input from the parser. If given an expression, calls pexec. If given an atom (such as a node name), returns it. Does an Error! If pexec gets a syntax error, and can be asked to guarantee a non-NIL result.
- SchemaCaseNames** Changed by ERICKSON at 25-Oct-79 00:02:07 from NEW
Given an induction schema, computes names for the cases.
- TranslateTo#** Changed by ERICKSON at 25-Oct-79 00:02:42 from NEW
Manages PropStorage, converts expressions to prop#s.
- UNMKLIST** Changed by ERICKSON at 25-Oct-79 00:02:59 from NEW
Inverse of MKLIST: converts <atom> to atom.
- UseNumbers** Changed by ERICKSON at 25-Oct-79 00:03:10 from NEW
Given a list, converts expressions to numbers. (Used by Transform, who is given transformations with expressions as children.)
- ZapSkolemFunctions** Changed by ERICKSON at 25-Oct-79 00:03:30 from NEW
Smashes the definitions of all Skolem functions, in case their arity changes.
- normalize** Changed by ERICKSON at 25-Oct-79 00:03:41 from NEW
New command: normalizes and prints the current proposition.
- print1** Changed by ERICKSON at 25-Oct-79 00:04:21 from NEW
Auxiliary for " print " ; does the work.
- printProofHeader** Changed by ERICKSON at 25-Oct-79 00:04:30 from NEW
- printWhat?** Changed by ERICKSON at 25-Oct-79 00:04:43 from NEW
Computes the target nodes for print.

retry Changed by ERICKSON at 25-Oct-79 00:05:07 from NEW
New command: starts you over at the current theorem.

theorem Changed by ERICKSON at 25-Oct-79 00:05:16 from NEW
New command: enters a theorem into the proof forest. Optional name.

up Changed by ERICKSON at 25-Oct-79 00:15:03 from NEW
New command: Moves cursor up one node in the current tree, but not past current theorem.

suppose Changed by ERICKSON at 25-Oct-79 00:17:20 from THEOREMPROVER
New proofstructure

try Changed by ERICKSON at 25-Oct-79 00:17:47 from THEOREMPROVER
For new proofstructure. May be any node, optionally assigning name.

split Changed by ERICKSON at 25-Oct-79 00:18:09 from THEOREMPROVER
proofstructure.

EditTheorem Changed by ERICKSON at 25-Oct-79 00:18:14 from TEDIT
proofstructure

TryChainingsAndNarrowings
Changed by ERICKSON at 25-Oct-79 00:18:17 from LOGIC
For new proofstructure; uses a local variable instead of AfterNorm.

replaceCommand Changed by ERICKSON at 25-Oct-79 00:19:03 from THEOREMPROVER
Proofstructure

AddRule Changed by ERICKSON at 25-Oct-79 00:19:14 from LOGIC
Proofstructure: Calls MakeTheorem instead of AddPredicate

complete Changed by ERICKSON at 25-Oct-79 00:20:21 from THEOREMPROVER
Proofstructure; uses a local variable

keep Changed by ERICKSON at 25-Oct-79 00:20:31 from THEOREMPROVER
Proofstructure. Remembers the name and status; allows commas. Distinction between groups and node names is messy, pending a list of known groups/nodes.

clear	Changed by ERICKSON at 25-Oct-79 00:21:05 from THEOREMPROVER Proofstructure
getPrettyNorm	Changed by ERICKSON at 25-Oct-79 00:21:10 from THEOREMPROVER Proofstructure: CurrentPropn instead of AfterNorm
augment	Changed by ERICKSON at 25-Oct-79 00:21:20 from THEOREMPROVER Proofstructure. Children are main: and thesis:
supersearch	Changed by ERICKSON at 25-Oct-79 00:21:29 from THEOREMPROVER Proofstructure. REMOVED FROM SERVICE
PrintBoth	Changed by ERICKSON at 25-Oct-79 00:21:40 from PROOFSTRUCTURE Proofstructure
genvcs	Changed by ERICKSON at 25-Oct-79 00:21:47 from PASCAL Proofstructure. Places the VCs, as theorems, under a root named after the program unit.
assume	Changed by ERICKSON at 25-Oct-79 00:22:25 from THEOREMPROVER
search	Changed by ERICKSON at 25-Oct-79 00:26:23 from THEOREMPROVER Proofstructure: new syntax.Proofstructure: different test for success.
ChooseChainingsAndNarrowings	
	Changed by ERICKSON at 25-Oct-79 00:27:02 from LOGIC Proofstructure: uses local var instead of AfterNorm
enter	Changed by ERICKSON at 25-Oct-79 00:27:11 from THEOREMPROVER Proofstructure: Restores name, makes Item a theorem, marks it " assumed " if it was proven or assumed when it was kept (otherwise " untried ").
InitDtv	Changed by ERICKSON at 25-Oct-79 00:27:37 from UTILITY Initializes Proofstructure cursor.

resume	Changed by ERICKSON at 25-Oct-79 00:27:44 from THEOREMPROVER New semantics for command: Retrieve the " last cursor " memory for the theorem.
invoke	Changed by ERICKSON at 25-Oct-79 00:28:01 from THEOREMPROVER Proofstructure
print	Changed by ERICKSON at 25-Oct-79 00:28:07 from AFFIRMEXEC Proofstructure: new options
SplitIntoSubgoals	Changed by ERICKSON at 25-Oct-79 00:28:12 from THEOREMPROVER Reversed order of fragments, so True comes before False
rulequan	Changed by ERICKSON at 25-Oct-79 00:28:25 from LOGIC Proofstructure: Uses a parameter instead of AfterNorm
CheckAndSplit	Changed by ERICKSON at 25-Oct-79 00:28:37 from PROOFSTRUCTURE Proofstructure: Returns the children, instead of calling AddPredicate
cases	Changed by ERICKSON at 25-Oct-79 00:45:53 from <ERICKSON>ATREE.;61 Proofstructure. Checks for no effect.
choose	Changed by ERICKSON at 25-Oct-79 00:46:03 from <ERICKSON>ATREE.;61 Proofstructure. Different check for success.
employ	Changed by ERICKSON at 25-Oct-79 00:46:27 from <ERICKSON>ATREE.;61 Proofstructure. Labels the children with case names.
let	Changed by ERICKSON at 25-Oct-79 00:46:32 from <ERICKSON>ATREE.;61 Proofstructure.
use	Changed by ERICKSON at 25-Oct-79 00:46:40 from <ERICKSON>ATREE.;61 Proofstructure. Makes the lemma be a theorem. Checks for a lemma which reduces to True.

Infix Changed by DTHOMPSON at 25-Oct-79 00:50:07 from SPECIFICATION modified to set binding strength of user-defined binary infix ops to 2, rather than 1.0

InitHierarchy Changed by DTHOMPSON at 25-Oct-79 00:50:21 from INFIXPRINT modified to set binding strength of prefix ops NOT and MINUS to 1 rather than 2.0

PrintPrompt Changed by DTHOMPSON at 25-Oct-79 00:50:33 from AFFIRMEXEC modified to set global variable CurrentEventNumber each time through the Dtps loop.

Changes to version 30

These functions have changed:

MakeLevels	Changed by DTHOMPSON at 23-Sep-79 23:24:18 from INFIXPRINT Ray changed this function to work properly in the case that the expr of a Qexpression is an atom. Now, " print variables " will function correctly.
DeclareType	Changed by ERICKSON at 23-Sep-79 23:29:58 from SPECIFICATION made undoable; adds name to KnownTypes
MakeConstant	Changed by ERICKSON at 23-Sep-79 23:30:48 from SPECIFICATION Made undoable.
Edit	Changed by ERICKSON at 23-Sep-79 23:30:52 from SPECIFICATION calls CheckForType
IsType	Changed by ERICKSON at 23-Sep-79 23:30:59 from SPECIFICATION uses KnownTypes
adopt	Changed by ERICKSON at 23-Sep-79 23:31:04 from SPECIFICATION call CheckForType
declareVar	Changed by ERICKSON at 23-Sep-79 23:31:09 from SPECIFICATION calls CheckForType on variable's type.
types	Changed by ERICKSON at 23-Sep-79 23:31:14 from NEW new command: prints KnownTypes. (for file Specn)
CheckForType	Changed by ERICKSON at 23-Sep-79 23:31:25 from AFFIRMEXEC spelling correct using KnownTypes.
CheckLoad	Changed by ERICKSON at 23-Sep-79 23:31:32 from UTILITY For old Affirm files, adds typename to KnownTypes.
InitDtvs	Changed by ERICKSON at 23-Sep-79 23:31:39 from UTILITY DTVS no longer a declared type.
InitializeLoad	Changed by ERICKSON at 23-Sep-79 23:31:49 from NEW New function to " notice " a type; sits at the end of fileCOMS; adds to KnownTypes. (utilizes NOSETSAVEVARS)

SetupFile Changed by ERICKSON at 23-Sep-79 23:32:09 from SPECIFICATION
COMS Include InitializeLoad.

AffirmMakesys Changed by TAYLOR at 24-Sep-79 00:43:15 from UTILITY
Correction in the naming of the sysout affirm file.

Somelfy Changed by MUSSER at 24-Sep-79 21:45:01 from NEW
Arguments are (vlist predicate) . For each variable in vlist that occurs in predicate, an existential quantifier is added to predicate.

SETUPCALLVCGEN Changed by MUSSER at 24-Sep-79 21:45:41 from VCGEN
Modified to existentially quantify non-var parameters to procedures or functions when they appear in the postcondition, when generating result lemmas.

SETUPCALLVCGEN Changed by MUSSER at 24-Sep-79 23:19:00 from <MUSSE>PREPOSTFIX.;1
Another change to make priming of pre and post condition variables work. Permits pre-condition to refer to initial values of either var or non-var variables, with either primed or unprimed variable symbols (equivalently) .

AffirmMakesys Changed by DTHOMPSON at 27-Sep-79 00:41:21 from <TAYLOR>DGTFIX.;1
modified to name the SYSOUT file " SAFFIRM.<version no> " , so that a user attempting to use the SYSout version before it is tested and then renamed won't get the newly genned version. Also modified the herald to output the version number.

listRewriteRules Changed by DTHOMPSON at 27-Sep-79 23:37:12 from FORMULAIO
modified to use the global variable " RewriteRuleOp " instead of the constant " == " as the operator between lhs and rhs of listed rules. RewriteRuleOp is currently set to " == " , but may be reset. It should probably be a user profile entry to ensure its value is one of the ones allowable on input (" == " , " <=> " , " <-> " , " :: ") .

AffirmError Changed by ERICKSON at 28-Sep-79 00:20:16 from UTILITY
Added a third error category, " mld " , which prints the message and then returns to caller (instead of doing ERROR! or ERROR)

typelfy Changed by ERICKSON at 28-Sep-79 00:24:21 from SPECIFICATION
Cleaned up to call pexec.

declareVar Changed by ERICKSON at 28-Sep-79 00:30:12 from
<ERICKSON>TYPE.;17
changed behavior for internal calls from VCGen -- only complains
about conflicting decs.

CheckForType Changed by ERICKSON at 28-Sep-79 00:30:48 from
<ERICKSON>TYPE.;17
Thrd arg defines action if type not defined -- error, nothing, or
declare it.

declareFun Changed by ERICKSON at 28-Sep-79 00:31:06 from
SPECIFICATION
use CheckForType on returned type.

sufficient? Changed by ERICKSON at 28-Sep-79 00:31:16 from SUFFICIENT
Use CheckForType.

setupDeclarations Changed by ERICKSON at 28-Sep-79 00:31:19 from PASCAL
Cleaned up to call declareVar, CheckForType.

APE Changed by DTHOMPSON at 1-Oct-79 00:44:22 from AFFIRMEXEC
modified to make 'fields' a specvar so this routine works inside a
block def. Temporary until I rewrite the routine to do much more
constraint checking on profile entry defs.

DeclareType Changed by ERICKSON at 2-Oct-79 17:16:42 from
<ERICKSON>TYPE.;17
Checks for illegal type names. Currently: insists type name and
fileCOMS be unbound, typename does not contain \ or ., is not
'Interface'

setGCmessage Changed by DTHOMPSON at 3-Oct-79 22:10:48 from AFFIRMEXEC
modified to fix a bug in what this routine returns. Now accurately
returns its previous value, turned into T or NIL.

AffirmGCGAG Changed by DTHOMPSON at 3-Oct-79 22:14:05 from AFFIRMEXEC
Now accurately returns its previous value, turned into T or NIL.

SuperSpell Changed by DTHOMPSON at 3-Oct-79 22:15:43 from AFFIRMEXEC
fixed a bug that caused the routine to not return its default when
all else failed. Now it does.

ListRules Changed by DTHOMPSON at 3-Oct-79 22:17:15 from
SPECIFICATION
This routine should be deleted. Nobody calls it anymore. It was
replaced by the new listing stuff.

getProfileConditions Changed by DTHOMPSON at 3-Oct-79 22:22:22 from AFFIRMEXEC modified to be a little smarter in its decisions as to whether or not the condition represent a valid condition. The condition expression can now be any CLISP expression.

getProfilePossibleValues

Changed by DTHOMPSON at 3-Oct-79 22:22:57 from AFFIRMEXEC fixed a bug that caused an atom to be returned, when a list is always the expected result.

Infix

Changed by DTHOMPSON at 4-Oct-79 00:28:21 from <DTHOMPSON>INFIXFIX.;6 modified to map special-symbol operators into their internal AFFIRM names, as described in " MapToInternal " below. Also changed to not add these internal names to #LIST\OF\SYSTEM\OPS, because they should already be there.

renameInfixOp

Changed by DTHOMPSON at 4-Oct-79 00:28:55 from <DTHOMPSON>INFIXFIX.;6 modified to ask " MapToInternal " to do the mapping of special-character operators into their internal names, rather than embedding the info in the code, as before. Now " renameInfixOp " is consistent with other users of the mapping fns.

renamePrefixOp

Changed by DTHOMPSON at 4-Oct-79 00:29:23 from <DTHOMPSON>INFIXFIX.;6 modified to use " MapToInternal " to do its mapping of special-character names into internal ones.

MapToInternal

Changed by DTHOMPSON at 4-Oct-79 00:29:36 from <DTHOMPSON>INFIXFIX.;6 new routine that maps special-character operators into their internal names: (= Equal) (+ PLUS) (- either DIFFERENCE or MINUS) (< LT) (> GT) (* TIMES) (/ QUOTIENT) (& AND) (~ NOT) (! NOT) (~= NE) (<= LE) (>= GE).

infix

Changed by DTHOMPSON at 4-Oct-79 00:30:22 from <DTHOMPSON>INFIXFIX.;6 routine should be deleted. It only did input for Infix; now ProcessAFFIRMCommand does it, and calls Infix directly.

Skim

Changed by DTHOMPSON at 4-Oct-79 00:34:12 from NEW new routine that just does a (PACK (DREMOVE char (UNPACK atomName))), i.e., skims a certain char from the atom name. If char=NIL or char=T, Blank is used for char. Currently used in listInfixOps, to pretty up the name of the infix function. (Artifact of way the op name is stored in TTYCHARSET: It's surrounded by blanks in its internal name.)

listInfixOps

Changed by DTHOMPSON at 4-Oct-79 00:35:08 from FORMULAIO modified to call Skim to pretty up the names of the infix functions, just before printing them.

getFileName

Changed by DTHOMPSON at 4-Oct-79 00:39:55 from AFFIRMEXEC rewritten to provide better control over input of file names. takes three parameters, all optional: firstFile, lastFile, and dontAskUser. First attempts to open firstFile for input, as described below in " getFileName1 " ; if this succeeds, the file handle is returned. If not, then if dontAskUser is true, we go on to try lastFile, as we did firstFile, returning either NIL or the file handle. All of this was done quietly: no output of any sort. If dontAskUser is NIL, its default, then TTYINFILE is called: this routine performs an EXEC GTJFN, and is the file name input protocol we all know and love. If TTYINFILE returns a file handle, getFileName returns it; if TTYINFILE returns 'ABORTED, getFileName processes lastFile, as above.

getFileName1

Changed by DTHOMPSON at 4-Oct-79 00:41:22 from NEW this new routine is a helper routine for getFileName, and actually does the testing of the filename. It takes one parameter, which represents a filename. It can be an atom, or a list, or NIL. Anything else causes getFileName1 to return NIL. NIL is sent back as NIL. atom is INFILEP'd, and the result is returned (NIL or file handle) . a list is either PACKed or PACKFILENAME'd, depending on whether its first element (and I mean first non-list element, and not a simple CAR) is a member of FILENAMEFIELDS, the LISP global spelling list for PACKFILENAME. All this means that getFileName is pretty flexible on file names, and should do the right thing in most cases. (Except that so far it only does INPUT recognition!)

firstElement

Changed by DTHOMPSON at 4-Oct-79 00:42:33 from NEW new routine that find the first non-list element of its parameter.

AffirmLoad

Changed by DTHOMPSON at 4-Oct-79 00:42:42 from AFFIRMEXEC modified to use getFileName to get its parameter, and AffirmError to report the error when the filename is not available.

- DTVS** Changed by DTHOMPSON at 4-Oct-79 00:42:53 from AFFIRMEXEC modified to use getFileName and AffirmError to get the command file name and report no file name; also modified to ensure the file about to be opened for input is closed.
- readp** Changed by DTHOMPSON at 4-Oct-79 00:43:14 from PASCAL modified to use getFileName and AffirmError, as described.
- TypeFile** Changed by DTHOMPSON at 4-Oct-79 00:43:26 from UTILITY modified to use getFileName and AffirmError. Also modified to ensure the file it is typing gets closed in case of error or user typing a control E.
- printName** Changed by DTHOMPSON at 4-Oct-79 17:01:30 from AFFIRMEXEC modified to fix a bug in the printout of the annotating mode exec prompt.
- AFFIRMMAPRINT** Changed by DTHOMPSON at 4-Oct-79 22:18:49 from UTILITY modified to clean up the code a little bit, and to make it more flexible. still has four parameters, header, list, lastSep, and tail: If header is non-NIL, jump to next line* and then print header; if header is T, just jump to next line; if header is not T and not NIL, follow header by blank; print list, separating all but the last element with " , " ; the last element is preceded by " , and " if there are three or more elements, and just " and " if there are two elements; the case of no elements, one element, and non-list are handled correctly; third parameter, lastSep, if non-NIL is used in place of " and " (for example, a common alternative is " or ") ; if tail is non-NIL, it is printed WITHOUT any separation from the last element of the list. if Tail is T, " . " is printed. lastly, jump to next line*. * -- rather than (printout NIL T) , which forces a new line, we use (printout NIL .TABO O) .
- copy** Changed by DTHOMPSON at 4-Oct-79 22:59:11 from AFFIRMEXEC This routine should be deleted; its input duncitons have been moved to ProcessAFFIRMCommand.
- printName** Changed by DTHOMPSON at 4-Oct-79 23:00:40 from <DTHOMPSON>PR2FIX.;1 modified to use the Unexpected routine, which centralizes Unexpected category handling in SELECTQs.
- reportProfileDBError** Changed by DTHOMPSON at 4-Oct-79 23:05:07 from AFFIRMEXEC modified to use Unexpected routine.

type

Changed by DTHOMPSON at 4-Oct-79 23:09:07 from PARSE
this routine in SPECIFICATION should be deleted; its input functions
have been moved to ProcessAFFIRMCommand.

Unexpected

Changed by DTHOMPSON at 5-Oct-79 00:13:07 from NEW
A new routine that processes errors that are of the 'unexpected'
variety, yet are not severe enough to halt. The routine mainly
keeps track of what unexpected things have occurred; each time a
new unexpected thing occurs, the user is told about it. Subsequent
times the error is ignored. The current things unexpected expects
to keep track of are: undeclared profile entry names, unexpected
affirm object categories (e.g., type, group, interface, variable, etc.
) in various routines that currently handle only a subset of the full
range of possible categories; unknown help topics (i.e., currently
all topics are unknown), unknown file types (source, saved),
unknown print objects (classifying output items for deciding how to
font them during annotating). Etc. There's also an " unexpected
category " category that unexpected expects, in case
unexpected gets called with a category it doesn't expect. (
compare this last statement to Russell's paradox...) Unexpected is
called with three parameters: category, function name, and
parameters. All should be supplied: none are optional.

Dtvs

Changed by DTHOMPSON at 5-Oct-79 00:15:43 from AFFIRMEXEC
fixed a bug in the timing mechanism that was introduced by the
new exec structure; a variable was not rebound for recursive calls
to the exec. Also extended the timer output to provide the
command name the timing is for. This is a precursor of the next
version, which will include a full monitoring capability, as we had for
the bakeoff.

GetAFFIRMCommand Changed by DTHOMPSON at 5-Oct-79 00:16:33 from AFFIRMEXEC
modified to extend command recognition to implicit 'E' commands;
also, upon a spelling error the user decides to default to 'note', the
input buffers are saved, and only restored if they are not NIL. This
is only if current command file is terminal. It attempts to cure a
bug in INTERLISP that causes the buffers to be packed with " NIL "

ProcessAFFIRMCommand

Changed by DTHOMPSON at 5-Oct-79 00:17:39 from AFFIRMEXEC modified as follows: new command, ?, which currently only displays the available command names, but which will be extended to provide more exec help. added copy command processing to SELECTQ. modified note command processing to turn off garbage collection messages during notes. added type command processing to SELECTQ.

SkipOverComments Changed by DTHOMPSON at 5-Oct-79 00:18:21 from NEW new routine that is used by GetAFFIRMCommand, in moving to command word. This routine checks to see if the first character in the input stream is a '{', the start of a pascal comment. If so, it calls the comment reader, skipPascalComment, and repeats its activities, thus skipping over all comments.

SkipToRealChars Changed by DTHOMPSON at 5-Oct-79 00:19:01 from NEW new routine used by GetAFFIRMCommand, skips over blanks, carriage returns, and tab characters. Halts at first non-blank character.

MissingECommand Changed by DTHOMPSON at 5-Oct-79 00:19:20 from AFFIRMEXEC

MissingECommand? Changed by DTHOMPSON at 5-Oct-79 00:19:35 from AFFIRMEXEC

StartMonitorCycle Changed by DTHOMPSON at 5-Oct-79 00:19:43 from NEW This new routine is currently just the renamed UpdateTimer routine, but will be extended to process the beginning of a monitor cycle.

EndMonitorCycle Changed by DTHOMPSON at 5-Oct-79 00:20:00 from NEW A New routine that currently processes the timer info, but will be extended to process the monitor info.

AFFIRMHelp Changed by DTHOMPSON at 5-Oct-79 00:20:17 from AFFIRMEXEC modified to call unexpected when the topic it is to report on is unrecognized. Extended to provide some info for the topic " exec " , namely a message saying " we're not there yet " , a pointer to the reference manual, and the current list of command names.

InitializeCommandLoop

Changed by DTHOMPSON at 5-Oct-79 00:20:46 from AFFIRMEXEC modified to delete a reference to an old timing variable which isn't global anymore, and also to ensure the terminal environment is reset. Thus control-D with break access off (or calls to AffirmExec) will reset terminal environment to ensure it's ok. (should fix the control-D from askuser calls bug that leaves you in no-echo mode.)

LowerInterLisp Changed by DTHOMPSON at 5-Oct-79 00:21:28 from AFFIRMEXEC

UpdateTimer Changed by DTHOMPSON at 5-Oct-79 00:22:42 from AFFIRMEXEC
This functions should be deleted: It's been usurped by StartMonitorCycle.

readp Changed by DTHOMPSON at 5-Oct-79 00:29:39 from <DTHOMPSON>FILES.;6
modified to surround the call to PARSE (which opens, reads, and closes the pascal source file) with a RESETLST/RESETSAVE, to ensure the file gets closed even if there's an error, or the user types control-E during input.

PARSE Changed by DTHOMPSON at 5-Oct-79 00:30:05 from PASCAL
modified to NOT do a CLOSEALL after reading its file, but instead to do a CLOSEF on the file. control a

profile Changed by DTHOMPSON at 5-Oct-79 17:22:51 from AFFIRMEXEC
modified to call CloseAnnotation after the parameters are read, so as to ensure the close quote in annotation mode.

saveUserProfile? Changed by DTHOMPSON at 5-Oct-79 17:23:17 from AFFIRMEXEC
modified to use TTYOUTFILE to get the file name to save the file on. typing control-E causes the routine to use the default user profile. So we now have output file recognition using operating system conventions, except escape doesn't work yet: we're doing a short GTJFN reather than a long one that accepts defaults. You now have to hit control-E to get the default.

UserProfileEnquiry Changed by DTHOMPSON at 5-Oct-79 17:23:54 from AFFIRMEXEC
modified to use getFileName to read in a file name when the user wants to read in a profile file. Also modified to combine the questions at the beginning of the session: you now get asked " Do you want to Modify, See, or Read your profile? " Modify and See are as before; Read prompts for a file name. The file name input uses operating system conventions, so control-F and escape work. To read in your default profile, hit control-E, and the mechanism will attempt to read your default.

DefaultUserProfile Changed by DTHOMPSON at 5-Oct-79 17:24:55 from AFFIRMEXEC
modified to reset ProfileAlreadyLoaded to NIL, so that after invoking DefaultUserProfile, the profile mechanism thinks everything just got started. Useful-if your SYSOUT is to be used by a variety of people, and you want their profiles to be loaded when they start up the sysout. Just invoke DefaultUserProfile and it re-establishes all the defaults and confuses the mechanism into thinking it's just beginning.

getFileName Changed by DTHOMPSON at 5-Oct-79 17:25:40 from <DTHOMPSON>FILES.;6
re-modified to NOT open the file -- It just returns the complete file name.

PrintPrompt Changed by DTHOMPSON at 7-Oct-79 22:26:16 from AFFIRMEXEC
modified to print an asterisk if there's no dribble file open, as an explicit of this fact to the user. Also modified to set a flag saying that we opened the SCRIBE command environment, if we're in annotation mode.

Annotating Changed by DTHOMPSON at 7-Oct-79 22:28:43 from AFFIRMEXEC
modified to initialize the flag that says we have an open SCRIBE environment called " AFFIRM command " .

CloseAnnotation Changed by DTHOMPSON at 7-Oct-79 22:29:01 from AFFIRMEXEC
modified to reset the flag that says we're in the SCRIBE environment " AFFIRM command " .

CreatePatchFile Changed by RBATES at 9-Oct-79 18:48:37 from <RBATES>CPAT30.;17
complete Rewrite of this function to fix some problems.

FtpFile Changed by RBATES at 9-Oct-79 18:49:00 from <RBATES>CPAT30.;17
Fix some problems with the JSYS calls.

PrintNews Changed by RBATES at 9-Oct-79 18:49:09 from <RBATES>CPAT30.;17
Files of the form NEWS.0 are treated as global news while files of the form NEWS.# where # is a number are written out with the note News specify to version # of Affirm.

UpdateAffirm Changed by RBATES at 9-Oct-79 18:50:15 from <RBATES>CPAT30.;17
Fixed some bugs.

UserProfile Changed by RBATES at 9-Oct-79 18:50:22 from <RBATES>CPAT30.;17
Added a comment that there is a compiler macro for this function.

UserProfileMacro Changed by RBATES at 9-Oct-79 18:50:31 from <RBATES>CPAT30.;17
This function implements the compiler macro for UserProfile.

WhatChanged	Changed by RBATES at 9-Oct-79 18:50:38 from <RBATES>CPAT30.;17 The profile database for previous versions of Affirm is now using a file to store comments already preformatted. Had to change this function to implement this change
findDefinition	Changed by RBATES at 9-Oct-79 18:51:08 from <RBATES>CPAT30.;17 Fix a problem with the call to EDITLOADFNS? (which changed in 132).
getComment	Changed by RBATES at 9-Oct-79 18:51:27 from <RBATES>CPAT30.;17 Added a flag AskFromFile which is initially NIL. If on the user will be asked if has file in which the comments for CleanupRequest is stored. It seems that no one was using the feature of reading in from a file the comments.
gripe	Changed by RBATES at 9-Oct-79 18:51:55 from <RBATES>CPAT30.;17 Fixed a problem with transcripts being sent as mail causing the Dribble file going away.
printChanged	Changed by RBATES at 9-Oct-79 18:52:10 from <RBATES>CPAT30.;17 Can now read the new Request Database of previous versions of affirm comments (see WhatChanged).
printChanged1	Changed by RBATES at 9-Oct-79 18:52:25 from <RBATES>CPAT30.;17 See printChanged
readReleaseFile	Changed by RBATES at 9-Oct-79 18:52:32 from <RBATES>CPAT30.;17 Does a readfile instead of loop until eof error.
requestCommentToFile	Changed by RBATES at 9-Oct-79 18:52:44 from <RBATES>CPAT30.;17 The function that write to a file the Request comments .
transcript	Changed by RBATES at 9-Oct-79 18:52:49 from <RBATES>CPAT30.;17 Put an errorset around the code so it won't blow up if there is no room on the system. Also D.Thompson sets a new variable.

GenIndex

Changed by DTHOMPSON at 9-Oct-79 22:24:26 from UTILITY modified to produce a listing of the functions contained on a set of files, where both the file and the relative position of the function on the file is provided. First arg is output file; second is list of files. Second arg = NIL defaults to SYSTEMFILES. Performs lots of LOADFROMS, takes about 25 pages, and doesn't leave the system in a good state from which to continue proving, etc. New wrinkle at end: any duplicate functions are listed, along with the files containing them.

DeleteCommand

Changed by DTHOMPSON at 10-Oct-79 17:11:23 from AFFIRMEXEC modified to not perform an ASKUSER if the provided command isn't a defined command. It now just says that.

renumber

Changed by DTHOMPSON at 10-Oct-79 17:11:34 from AFFIRMEXEC modified to simplify the error message, and to default the event number to 1 if the provided parameter is NIL.

ProcessAFFIRMCommand

Changed by DTHOMPSON at 10-Oct-79 17:11:49 from <AFFIRM>CPATCH-30.;1 modified to fix a bug in the parameter pickup of the renumber command.

Changes to version 29

These functions have changed:

Equal	Changed by ERICKSON at 2-Sep-79 17:14:37 from CEVAL Should be removed from the system, since Equal\Interface now goes directly to the Equal\datatype form.
MakeAlist	Changed by ERICKSON at 6-Sep-79 18:04:16 from THEOREMPROVER no change.
NE\Boolean\Interface	Changed by ERICKSON at 6-Sep-79 18:04:28 from BOOLEAN Only converts Boolean args to NE\Boolean; leaves the rest for NE\BUILTIN\Interface to handle.
trueBranch	Changed by ERICKSON at 6-Sep-79 18:05:19 from NEW embodies the EVAL-under-RESETVARS done by the IfThenElse package. We may wish to make this a macro.
falseBranch	Changed by ERICKSON at 6-Sep-79 18:05:33 from NEW see trueBranch
IfThenElse	Changed by ERICKSON at 6-Sep-79 18:05:50 from CEVAL Calls trueBranch,falseBranch instead of doing the RESETVARS itself.
IfThenElse1	Changed by ERICKSON at 6-Sep-79 18:06:00 from CEVAL Because IfThenElse does the RESETVARS before QOPs and IFOPs are pulled out of the :test, not everything got normalized. For the time being, we provide for reevaluation of :ThenPart and :ElsePart in the event that this extraction occurred. IfThenElse1 takes a second argument which, if T, informs it that IfThenElse0 extracted a QOP. In this case, or if p:Operator=IFOP, we reevaluate here.
IfThenElse0	Changed by ERICKSON at 6-Sep-79 18:07:36 from CEVAL If we extract a QOP, call IfThenElse1 (& T).
AffirmError	Changed by ERICKSON at 10-Sep-79 17:08:38 from NEW no change
EqualityFromIf	Changed by TAYLOR at 13-Sep-79 17:07:39 from LOGIC Fixes a problem with the handling of AND by equality and removes a STACK OVERFLOW bug.
CheckLoad	Changed by ERICKSON at 13-Sep-79 17:38:51 from UTILITY Cleaned up the messages, added one for the new equality

- CloseDribble** Changed by ERICKSON at 13-Sep-79 17:39:01 from UTILITY
Fixed the problem where a carriage-return was missing, causing XED to overwrite the name of the transcript.
- readp** Changed by DTHOMPSON at 14-Sep-79 20:57:20 from PASCAL
modified output format to scrunch output and to make it English.
- typecheck** Changed by DTHOMPSON at 14-Sep-79 20:57:36 from PASCAL
modified output format of " type checking " message to scrunch it.
- genvecs** Changed by DTHOMPSON at 14-Sep-79 20:57:47 from PASCAL
modified output format to scrunch listing.
- AFFIRMMAPRINT** Changed by DTHOMPSON at 16-Sep-79 22:33:46 from UTILITY
- Convert** Changed by DTHOMPSON at 16-Sep-79 22:52:05 from FORMULAIO
This function wasn't modified. It's currently in two files. It should be removed from FORMULAIO, and made an entry in the BLOCK spec in INFIXPRINT.
- turn** Changed by DTHOMPSON at 17-Sep-79 00:15:03 from AFFIRMEXEC
modified to print a message requesting the user use the profile command instead of the turn command. The turn command will be retired completely shortly.
- reportProfileDBError** Changed by DTHOMPSON at 17-Sep-79 00:45:38 from AFFIRMEXEC
modified to save the undefined entry names on a new variable. This change coalesces the places where unexpected names are kept. There is now just one variable, 'Unexpected', which is a record structure of record type 'UnexpectedLists', which keeps track of the unexpected things we've seen. (only one message gets printed, rather than a whole range of messages.) There are currently three categories of unexpected items: undefined profile entry names (hence the change to this function); unexpected categories of AFFIRM objects in the 'needs' package; and unexpected categories of output object in the 'printName' routine. (If this was all greek, never mind! It's all internal structure, no user-seeable mods [I hope...])
- AffirmInitAfterMakesys**
Changed by RBATES at 18-Sep-79 00:30:21 from UTILITY
Function has a new parameter FromSysout which it uses to tell to if it is being called from a sysout or makesys version of affirm.

AffirmMakesys Changed by RBATES at 18-Sep-79 00:31:43 from UTILITY
Now calls AffirmInitAfterMakesys instead of AffirmExec. This will cure a problem of initializing Affirm since Makesys version and the sysout version will due about the same initialzing.

AffirmNews Changed by RBATES at 18-Sep-79 00:32:14 from NEW
This function will look for a " news date " on the given file and print the news since that date. It will write a news date at the end of the file. A news date is a number after the STOP at the end of the file.

CreatePatchFile Changed by RBATES at 18-Sep-79 00:32:49 from REQUEST
This is rewrite of this function that hopefully will cure some problems of earlier versions.

DefaultUserProfile Changed by RBATES at 18-Sep-79 00:33:04 from AFFIRMEXEC
Now sets the rootProfileName. This variable is the name of the master profile file.

FtpFile Changed by RBATES at 18-Sep-79 00:33:25 from NEW
This function will FTP one file to the current machine. It uses ForceFtp to check to see if the function has to check wheter or not the file is already on the given machine.

InitializeUserProfile Changed by RBATES at 18-Sep-79 00:34:01 from AFFIRMEXEC
Modify to print the " NEWS " when starting up AFFIRM.

MakeLevels Changed by RBATES at 18-Sep-79 00:34:31 from INFIXPRINT
Remove the check not to print the given list if the find list is NIL.

PrintFormula Changed by RBATES at 18-Sep-79 00:35:00 from INFIXPRINT
The given list will not be printed as forall.

PrintNews Changed by RBATES at 18-Sep-79 00:35:19 from NEW
This function print the news since the given date. It looks in <affirm> and name NEWS if directory and Name are not given.

ReadUserProfileFile Changed by RBATES at 18-Sep-79 00:35:52 from AFFIRMEXEC
Modify to call Affirm News if RootProfile=T. This call is at the best possible moment since the news date is just 6 characters away.

TypeFile Changed by RBATES at 18-Sep-79 00:36:47 from UTILITY
Now prints the full file name.

UpdateAffirm Changed by RBATES at 18-Sep-79 00:36:54 from NEW
This function will try to FTP current files from ISIC to current host if the has to update the file. This function depends on versions numbers matching on both machines.

UpdateFunction Changed by RBATES at 18-Sep-79 00:37:41 from REQUEST
Now calls findDefinition with only one parameter and not with AffirmFile.

WriteUserProfileFile Changed by RBATES at 18-Sep-79 00:38:01 from AFFIRMEXEC
Now writes the news date at the end of the file.

checkUser Changed by RBATES at 18-Sep-79 00:38:10 from REQUEST
Now upper cases the user name.

complete Changed by RBATES at 18-Sep-79 00:38:24 from THEOREMPROVER
Fixed a problem with checking for the Equal operator.

copy Changed by RBATES at 18-Sep-79 00:38:35 from AFFIRMEXEC
Moved a little of this function to TypeFile.

define Changed by RBATES at 18-Sep-79 00:38:44 from SPECIFICATION
now calls ruleSeqParse

findDefinition Changed by RBATES at 18-Sep-79 00:38:49 from REQUEST
Now calls EDITLOADFNS? to decide where a function is and to load it. This will cure a problem with the Request package not noticing a users definition of a function since it was compiled.

gripe Changed by RBATES at 18-Sep-79 00:39:18 from AFFIRMEXEC
gripe now will send along the dribble file as seperate message if the user wants. This feature should be used only in needed as the dribble files are quite big.

rule Changed by RBATES at 18-Sep-79 00:40:43 from LOGIC
Now calls ruleSeqParse .

ruleSeqParse Changed by RBATES at 18-Sep-79 00:41:26 from NEW
This function calls parse with the new production ruleSeq. ruleSeq is list of " rule " sepeated by " , " . Where rule is expression optionally followed by one of ' (<-> <=> :: ==) and another expression. This solves the priority problem with= used to stand for two different things. Since the second expression is optional this gives us upward compantliably.

schema Changed by RBATES at 18-Sep-79 00:42:46 from SPECIFICATION
now calls ruleSeqParse.

- AffirmExec** Changed by DTHOMPSON at 18-Sep-79 18:45:34 from AFFIRMEXEC modified as part of the new exec; now performs a call to the initialization routine, and then calls the Dtvs exec.
- AffirmLoad** Changed by DTHOMPSON at 18-Sep-79 18:45:52 from AFFIRMEXEC modified to take as its parameters the filename to load and the method (fast or slow) with which to load the file. method=NIL implies use user profile value (LoadMethod).
- Annotating** Changed by DTHOMPSON at 18-Sep-79 18:46:19 from AFFIRMEXEC modified as part of the new exec; most of its functionality deleted. Now simply sets the global variable Annotating to T or NIL.
- DTVS** Changed by DTHOMPSON at 18-Sep-79 18:46:43 from AFFIRMEXEC modified as part of the new exec, to call Dtvs with a filename.
- Dtvs** Changed by DTHOMPSON at 18-Sep-79 18:47:08 from AFFIRMEXEC modified greatly as part of the new exec. mostly broken into other routines, which the new Dtvs now invokes in the right order. New addition is retoring terminal environment when user types control-E, to guard against echo/line buffering being turned off.
- EstablishInterLispEnvironment**
Changed by DTHOMPSON at 18-Sep-79 18:48:09 from NEW new routine that sets system parameters when 'lisp' command is given. Currently, BreakAccess, LineLength, HistorySlice, and GCMessage/Pages are set according to user wishes, and reset back to the AFFIRM-set values when 'OK' is typed.
- GetAFFIRMCommand** Changed by DTHOMPSON at 18-Sep-79 18:48:56 from NEW new function; encapsulates that part of old 'Dtvs' that input the command name, skipping pascal comments, and spelling correcting the command name. New wrinkle to command recognition is checking for implicit 'E' command (but see below to 'MissingECommand').
- InitializeCommandLoop**
Changed by DTHOMPSON at 18-Sep-79 18:49:31 from NEW new routine, called by AffirmExec, that initializes some AFFIRM variables just before 'Dtvs' is called. Currently, this is CurrentType, CurrentTerminalEnvironment, LowerExec.
- LowerInterLisp** Changed by DTHOMPSON at 18-Sep-79 18:49:55 from NEW new routine that encapsulates that part of 'Dtvs' dealing with the 'lisp' command. This function surrounds the call to the USEREXEC with calls to routines that establish an interlisp environment, and restore the affirm environment.

- MissingECommand** Changed by DTHOMPSON at 18-Sep-79 18:50:28 from NEW
New routine that is meant to perform the processing necessary to interpret a LISP-exec command. The current version is a dummy place-holder for the real routine which ain't debugged yet.
- MissingECommand?** Changed by DTHOMPSON at 18-Sep-79 18:51:05 from NEW
new routine which makes some simple checks to see if the command word (which ain't legal) is a LISP directive, for which the user forgot to type E. current checks are: member of set { (,[]; (EVALVword) ~= NOBIND; (word has a function def and first arg ~= 'file; word is on LISPXMACROS.
- PrintPrompt** Changed by DTHOMPSON at 18-Sep-79 18:51:58 from NEW
new routine that encapsulates that part of Dtps which printed the prompt. New wrinkle adds clean handling of annotating mode.
- ProcessAFFIRMCommand**
Changed by DTHOMPSON at 18-Sep-79 18:52:18 from NEW
new routine which corresponds to the SELECTQ of old 'Dtps'. Wrinkles include renaming ';' to CommandTerminator (because I never could stand magic constants); renaming file to commandFile; renaming PASCAL\READ\TABLE to PascalReadTable (for no good reason, necessarily, except it looks prettier); replacing calls to RATOMS-to-semi, when the resulting list was NOT used, by calls to ReadRestOfLine; adding commands ImplicitE, needs, renumber; modifying print part of SELECTQ to perform the input for print routine; adding schemas (with an s!); modifying load part of SLECTQ to perform the input before calling AffirmLoad.
- ReadRestOfLine** Changed by DTHOMPSON at 18-Sep-79 18:53:50 from NEW
new routine whih simply skips to CommandTerminator.
- RestoreAFFIRMEEnvironment**
Changed by DTHOMPSON at 18-Sep-79 18:54:03 from NEW
new routine which restores the affirm parameters reset by 'Establish Interlisp environment' when the 'lisp' command was invoked.
- RestoreTerminalEnvironment**
Changed by DTHOMPSON at 18-Sep-79 18:54:15 from NEW
new routine which resets terminal characteristics as remembered by the 'Save terminal envbironment' routine.

SaveTerminalEnvironment

Changed by DTHOMPSON at 18-Sep-79 18:54:33 from NEW
new routine which saves the terminal environment (once, hopefully) , for restoral upon dtvs recleviung a control-E. Currenly, the parameters saved are line buffering (T or NIL) ; echo mode(T or NIL) , echo controls for control characters 1A thru 1Z (but not esc, etc, 'cuz I'm not sure how) ; delete controls for LINEDELETE 1STCHDEL NTHCHDEL POSTCHDEL EMPTYCHDEL ; delete control for echo (ECHO or NOECHO) .

UpdateTimer

Changed by DTHOMPSON at 18-Sep-79 18:55:37 from NEW
new routine which encapsulates the old 'Dtps' handling of the timer. mod keeps timer current, but doesn't calculate time used since last check point nor print anything unless Timer flag is on.

needs

Changed by DTHOMPSON at 18-Sep-79 18:56:10 from NEW
new routine meant to be initial kernel of a database. This routine defines a new AFFIRM command which allows the user to explicitly state the types (and later, the other objects) upon which a particular type depends. The implementation basically attempts to run off and load the type defs for those types listed in the needs list that are not yet loaded. (Routine dummied out fro the currnt version 'cuz its companion routine, listNeeds, wasn't debugged) .

renumber

Changed by DTHOMPSON at 18-Sep-79 18:57:06 from NEW
new routine that defines a new command. renumber x; where x is an integer greater than 0 and less than 1000, resets the event number so that the NEXT event number will be x. Very handy on annotated trnascripts, when you want to cover up a mistake; you can delete a section of the transcript later, and still have consecutive event numbers. WARNING: be careful of UNDOing using ABSOLUTE event numbers, after renumbering. use only relative (i.e., instead of undo 54; try tping undo -3;)

DWIMUSERFN

Changed by DTHOMPSON at 18-Sep-79 18:57:57 from UTILITY
modified as part of the new exec, to call Dtps with input file T (= terminal) . also added (PRINTBELLS) (DOBE) to sections calling Dtps, and moved CLEARBUF up to after DOBE, before printout of long " Please declare... " message. Now, typing ahead onc you here the bells, and start getting the message, is allowed. It wasn't before.

listNeeds

Changed by DTHOMPSON at 18-Sep-79 18:58:29 from NEW
new routine that when it works will output in pretty listing the types required to be loaded before the current type can be used (i.e., listed, or etc.) .

- listOneRule** Changed by DTHOMPSON at 18-Sep-79 18:58:50 from FORMULAIO modified to put out parens around rhs of rules upon output, if necessary.
- listRewriteRules** Changed by DTHOMPSON at 18-Sep-79 18:59:05 from FORMULAIO modified to use " == " symbol between lhs and rhs of all rules, rather than " = " .
- listTypeParts** Changed by DTHOMPSON at 18-Sep-79 18:59:14 from FORMULAIO modified to call listNeeds as appropriate.
- parenthesize** Changed by DTHOMPSON at 18-Sep-79 18:59:24 from NEW new routine that decides whether the rhs of rules need to be parenthesized. It turns out that this is now not necessary, since the parser was finally modified to accept as equation, rather than an expression, where the equation is exp " == " exp. But I'm parenning the rhs anyhow. Decision is: if main op of rhs is one of {= or and imp}, then parenthesize; else don't. The routine is smart enuf to handle Qexpressions correctly. c
- printName** Changed by DTHOMPSON at 18-Sep-79 19:00:23 from AFFIRMEXEC modified to add new print categories " TypeListing " , " ExecPrompt " to those printout forms that depend on annotation mode flag.
- print** Changed by DTHOMPSON at 18-Sep-79 19:00:45 from AFFIRMEXEC modified rather much. param is now a list rather than a file name; print does NOT do any input. SELECTQ is now greatly changed to clean it up, and consistentize output, while srunching it some.

Changes to version 28

These files have changed:

UTILITY Changed by ERICKSON at 31-Aug-79 18:21:02 from <AFFIRM>UTILITY.;20
Reorganized the fileCOMS to provide a little more structure. There are still things in here that should be elsewhere, and functions (like InitDtvs) that might be merged in with the other actions. Currently has 15 categories, plus Limbo.

These functions have changed:

ApplyAllEqHyps Changed by MUSSER at 30-Aug-79 00:17:47 from LOGIC
Corrected a bug which caused some equality hypotheses to be ignored in REPLACE's.

SetupFile Changed by MUSSER at 30-Aug-79 00:18:30 from SPECIFICATION
Extended to include the Equal\typeName function on the file for typeName.

Completer Changed by MUSSER at 30-Aug-79 00:19:36 from LOGIC
Changed to recognize Equal ops created for new types. Also provides the correct Equal op when generating a new equation.

CriticalPairs Changed by MUSSER at 30-Aug-79 00:21:15 from LOGIC
Now produces an equation instead of just the (LHS RHS) pair. (Because it's easier to figure out the correct Equal op here than outside.)

RulesThatMightInteract Changed by MUSSER at 30-Aug-79 00:22:14 from REWRITERULE
Changed to construct each equation with the right Equal op.

AddRule Changed by MUSSER at 30-Aug-79 00:23:08 from LOGIC
Changed to recognize individual Equal ops.

DeclareFun Changed by MUSSER at 30-Aug-79 00:23:59 from SPECIFICATION
Extended to put the Equal op of the range of the function on the property list of the function name (under EqualOp property) for use by RulesThatMightInteract in constructing equations.

DeclareType Changed by MUSSER at 30-Aug-79 00:24:55 from SPECIFICATION
Extended to include creation of the Equality function for the type.

EQV\Boolean Changed by MUSSER at 30-Aug-79 00:27:44 from BOOLEAN
Modified as part of new approach to Equality.

AND\Boolean Changed by MUSSER at 30-Aug-79 00:28:11 from BOOLEAN
Modified as part of new approach to Equality.

IMP\Boolean Changed by MUSSER at 30-Aug-79 00:28:35 from BOOLEAN
Modified as part of new approach to Equality.

OR\Boolean Changed by MUSSER at 30-Aug-79 00:28:55 from BOOLEAN
Modified as part of new approach to Equality.

IfThenElse Changed by MUSSER at 30-Aug-79 00:30:00 from CEVAL
Modified as part of new approach to Equality, and extended to
permit conditional equations.

IfThenElse2 Changed by MUSSER at 30-Aug-79 17:06:11 from
<MUSSER>NEWEQUAL.;16

MakeInitialValueSymbols
Changed by MUSSER at 31-Aug-79 17:27:09 from VCGEN

setupDeclarations Changed by MUSSER at 31-Aug-79 17:27:36 from PASCAL

baseNameSubst Changed by MUSSER at 31-Aug-79 17:27:37 from UTILITY

CleanupFunction Changed by ERICKSON at 31-Aug-79 17:28:14 from REQUEST
Changed to get the file name from the FILEDATES property, instead
of doing INFILEP on the root file name. This makes a difference
when the patch file is in someone else's directory (for example,
when releasing somebody else's patches)

CloseDribble Changed by ERICKSON at 31-Aug-79 18:23:46 from UTILITY
Prints message to terminal, not primary output. Thus may go into an
exec, etc, without problems if in the middle of a compile.

AffirmMakesys Changed by TAYLOR at 1-Sep-79 00:32:18 from
<TAYLOR>SYSOUTFIX.;1
A sysout version of AFFIRM will be created with each new release
allowing the user to choose whichever is more suitable. The file will
be named SAFFIRM.SAV;currentAffirmVersionNumber.

AffirmError Changed by ERICKSON at 1-Sep-79 00:34:23 from NEW
Provides a centralized location for error messages. Takes one or a
list of things to print, and then does ERROR!. Second parameter may
be 'internal, signalling a problem in Affirm -- currently this causes
an ERROR so break can occur.

Changes to version 27

These functions have changed:

- WhoOwnsFile** Changed by ERICKSON at 27-Aug-79 17:27:52 from REQUEST RESETLST; see lockFile
- WhoOwnsFunction** Changed by ERICKSON at 27-Aug-79 17:28:00 from REQUEST RESETLST; see lockFile
- mapEntryFile** Changed by ERICKSON at 27-Aug-79 17:28:08 from REQUEST RESETLST; see lockFile
- mapEntryFunction** Changed by ERICKSON at 27-Aug-79 17:28:12 from REQUEST RESETLST; see lockFile
- lockFile** Changed by ERICKSON at 28-Aug-79 00:44:01 from <ERICKSON>REQUEST.;2
If a user hits control-e at the wrong time when the request package is in operation (even if it's only doing a WHEREIS), the request file will be left open in a read/write state, rendering it unavailable to other users. To catch the most common points for this to happen, callers to lockFile may use a RESETLST; if lockFile's second argument is set, it does a RESETSAVE, causing the file to be automatically closed upon any exit (normal or error) from the enclosing RESETLST. (Thus the caller need not later call unLockFile.)
- employ** Changed by ERICKSON at 28-Aug-79 00:44:47 from <ERICKSON>EMPLOY.;2
Was calling DREMOVE on elements of AfterNorm's find list, so it wasn't properly undoable. Now /DREMOVE.
- getComment** Changed by ERICKSON at 28-Aug-79 00:46:37 from REQUEST
Dave Thompson changed RATOMS for the sake of annotated transcripts. However, getComment was using ratomsRetto, which assumed that it could return to RATOMS with a sSTOP (to be euphemistic) on end-of-file; this was no longer the case. (As a result, any function-changed comments which were to be read from a file instead were made empty.) To fix this, the call to RATOMS was changed to READFILE.
- DTVS** Changed by DTHOMPSON at 28-Aug-79 22:37:48 from AFFIRMEXEC
modified to take an optional second parameter, dontPrint, in order to turn off the output message when the file AFFIRM is reading from is to be hidden from the user, as in the case of a REDO command.

- AffirmRATOMS** Changed by DTHOMPSON at 28-Aug-79 22:38:54 from AFFIRMEXEC modified to call CloseAnnotation, rather than check directly for the case that we're annotating, that we are reading a command's parameters, etc. (This routine gets MOVD to RATOMS, thus redefining the latter routine. The purpose is to allow the output of a close-quote in the case that we are in annotation mode and have already output the SCRIBE commands to open a command line environment)
- PrintProofs** Changed by DTHOMPSON at 28-Aug-79 22:40:04 from PROOFSTRUCTURE modified output format slightly.
- listInfixOps** Changed by DTHOMPSON at 28-Aug-79 22:40:12 from NEW new routine which is invoked by the routine listInterfaces, to output the appropriate INFIX command for any interfaces just listed by listInterfaces that happen to be infix operators.
- listOneRule** Changed by DTHOMPSON at 28-Aug-79 22:40:37 from NEW new routine, lists one rule (axiom, definitions, lemma, schema, etc) , with appropriate header, tail. Called by routine listRewriteRules, which supplies the necessary head and tail strings according to user profile settings.
- listDeclarations** Changed by DTHOMPSON at 28-Aug-79 22:41:11 from NEW new routine that lists the declarations of a data type. called by listTypeParts, which is the main routine of the new type listing stuff.
- parse** Changed by DTHOMPSON at 28-Aug-79 22:41:30 from FORMULAIO modified to call CloseAnnotation after finishing input. This allows the output of a close-quote after command parameters have been parsed when we happen to be in annotation mode.
- CloseAnnotation** Changed by DTHOMPSON at 28-Aug-79 22:41:54 from NEW new routine which centralizes the hassles of determining whether or not we output a close quote. The mechanism is as follows: If we are in annotation mode, AND we just read a semicolon, AND we were reading from the terminal, THEN output a close quote, which hopefully will match the open quote output as part of the command line prompt.
- readp** Changed by DTHOMPSON at 28-Aug-79 22:42:27 from PASCAL
- listInterfaces** Changed by DTHOMPSON at 28-Aug-79 22:42:44 from NEW new routine which outputs the interfaces of a data type, grouped as indicated by the user profile entry InterfaceGrouping.

- print** Changed by DTHOMPSON at 28-Aug-79 22:43:13 from AFFIRMEXEC modified to replace the old data type listing section with a new one, that calls CheckForType, to perform spelling correction on type names; and then turns off GC messages, and calls the routine listTypeParts to actually list the data type. GC messages are then reset to what they were before.
- WriteUserProfileFile** Changed by DTHOMPSON at 28-Aug-79 22:43:44 from AFFIRMEXEC modified for the umpteenth time to fix a bug in my understanding of LISP loops. It should work now. User will hopefully stop getting ridiculous error messages about NIL not having an appropriate profile entry.
- PrintBoth 1** Changed by DTHOMPSON at 28-Aug-79 22:44:13 from PROOFSTRUCTURE modified output format.
- redo** Changed by DTHOMPSON at 28-Aug-79 22:44:19 from AFFIRMEXEC modified to call DTVS with second parameter T, which causes DTVS to NOT print the name of the file being read from. This effectively hides the implementation of the redo command, which shouldn't be viewable to the normal user.
- PrintProof** Changed by DTHOMPSON at 28-Aug-79 22:44:43 from PROOFSTRUCTURE modified output format.
- listTypeParts** Changed by DTHOMPSON at 28-Aug-79 22:44:46 from NEW new routine, the main routine of the new data type listing stuff. Takes two parameters, the type name, and a list of parts to be listed. It first corrects the list of parts by using a spelling list; if the parts list is NIL then the complete parts list TypeParts is used (TypeParts used to be called ListingKinds). Thus callers can get any order of parts they want (almost!) by providing a non-NIL second parameter. This routine does NOT print the header line " type <typeName>," , nor does it print the tail " end {<typeName>; " . This is to make it more difficult to re-read the output of the listing in the case that order of parts differs from that more-or-less required by AFFIRM (i.e., declarations before interfaces; interfaces before axioms). The print command DOES output the header and tail, assuming that the user wouldn't be asking for it if he or she didn't want it.

listRewriteRules Changed by DTHOMPSON at 28-Aug-79 22:46:49 from NEW new routine which lists the rules of a type-- axioms, lemmas, defns, or schemas. Each call to this routine takes three parameters, the typename, the actual part (axioms, lemmas, etc) to be listed this time, and a flag that says whether or not to group the output. This third flag is set according to the user profile when listRewriteRules is called from listTypeParts, but may be set in other manner when this routine is called from elsewhere.

quit Changed by DTHOMPSON at 28-Aug-79 22:47:39 from UTILITY modified output format.

WriteUserProfileFile Changed by DTHOMPSON at 29-Aug-79 00:01:38 from <DTHOMPSON>UPFIX1.;1 modified yet again to get a loop to collect what it's supposed to!

redoFilePointers Changed by DTHOMPSON at 29-Aug-79 00:04:19 from REQUEST modified to remove the requirement that you be Ray Bates to create a new version of AFFIRM. Now, the only requirement is that you be a GOODGUY (i.e., one of the PV group members) .

printName Changed by DTHOMPSON at 29-Aug-79 00:27:36 from AFFIRMEXEC modified to use a different SCRIBE environment in system-printed commands than is used in user-typed commands. To avoid an obscure SCRIBE habit.

Changes to version 25**These files have changed:**

INFIXPRINT Changed by RBATES at 7-Aug-79 17:09:10 from <RBATES>INFIXPRINT.;6
Does 2 things different. Uses the new set of operators called I/O operators which are the shorten names of the xeval operators. Also has a new internal form for the second pass. Instead of(1 ATOM) the new form is just ATOM. This change saves CONSES as the expense of speed.

These functions have changed:

copy Changed by DTHOMPSON at 2-Jul-79 22:53:31 from NEW
A new comand that essentially does what TCOPY does, but to only one file at a time. copy <file name>; is the syntax.

CheckForType Changed by DTHOMPSON at 6-Jul-79 00:29:36 from NEW
A new routine that performs spelling correction on type names. Takes three parameters, the first, TypeName, mandatory, and the second and third, DontTellUser and DontAbort, optional. TypeName can be T, in which case CurrentType (If it is non-NIL) is returned. The second parameter is used by the spelling corrector to decide whether to print the(old => new) message. The third parameter, DontAbort, causes CheckForType to simply return NIL when the TypeName isn't a known type, rather than performing an ERROR!, the default.

AffirmGCGAG Changed by DTHOMPSON at 9-Jul-79 00:15:38 from NEW
This routine is the new GCGAG for AFFIRM. It maps old calls to GCGAG with parameter non-NIL into calls to the new routines setGCmessage and setGCpages, which are part of the user profile stuff. calls to the old routine GCGAG with parameter NIL still get passed on through. The old routine has been renamed to InterLispGCGAG. These changes allow the new routines to be onvoked where they should be, without major mods to all parts of AFFIRM to catch and change the GCGAG calls. GCGAG's definition is forst moved to InterLispGCGAG; then this routine (AffirmGCGAG) is moved to GCGAG.

setGCmessage Changed by DTHOMPSON at 9-Jul-79 00:22:48 from AFFIRMEXEC
this routine takes no parameters. It updates the InterLisp internal variables (via GCMESS) to display the " collecting " message, according to what the User Profile says to do. 'GarbageCollectionMessage = None says (GCGAG NIL) ; = Normal says (GCGAG #pages) , where #pages is another profile entry; and = Compact says call GCMESS with various strings to reduce the size of the message.

setGCpages Changed by DTHOMPSON at 9-Jul-79 00:23:53 from AFFIRMEXEC
This routine takes no parameters. It uses the user profile to reset the InterLisp internal variable (via GCMESS 5) that tracks the number of pages below which the system prints out a little more info during garbage collections.

MakeInitialValueSymbols Changed by MUSSER at 10-Jul-79 22:38:23 from VCGEN
Fixed a bug that occurred when used for initial value symbols for subgoal assertions.

baseName Changed by MUSSER at 10-Jul-79 22:49:28 from VCGEN
Fixed to work with changes introduced by type checking of programs.

MakeBaseName Changed by MUSSER at 10-Jul-79 22:49:59 from VCGEN
Fixed to work with changes introduced by type checking of programs.

UserProfileEnquiry Changed by DTHOMPSON at 13-Jul-79 00:23:06 from AFFIRMEXEC
Modified the interaction with the user a little: If you respond 'See' to the question (s) ... " do you want to modify or see... " , then system, after displaying the information, RE-ASKS you if you NOW want to modify any of the entries just displayed. D Wile suggested this. The order of groups was also modified, so that the 'ungrouped entry' group is displayed last.

profile Changed by DTHOMPSON at 13-Jul-79 00:23:58 from AFFIRMEXEC
Modified very slightly to smooth out printing process, and also to use its own read table (rather than PASCAL\READ\TABLE) . The latter change allows escapes in profile names, and makes question mark a break character, effectively disallowing them in profile entry names.

APE Changed by DTHOMPSON at 13-Jul-79 00:24:34 from AFFIRMEXEC
Modified to work when block compiled. Previous version used an internal EVAL which referred to variable names which were gone under the block compile.

- validateValue** Changed by DTHOMPSON at 13-Jul-79 00:24:55 from AFFIRMEXEC
Modified to make its error messages readable. Previous version's error messages did NOT print profile entry name of the entry in error. This made error messages incredibly cryptic: " 34?? " Now it prints the entry name also. control z
- getNewValue** Changed by DTHOMPSON at 13-Jul-79 00:25:28 from AFFIRMEXEC
Modified to make all the ASKUSER calls require confirmation, via blank, carriage return, or escape. Blank and carriage return still indicate old value when typed as the first character to an interaction.
- typelfyStatement** Changed by MUSSER at 18-Jul-79 00:02:45 from PASCAL
Corrected to perform typechecking of the Index Identifier of for loops and of the THUS assertion of repeat loops. Warning: the verification condition generator still doesn't do anything with the THUS assertion of REPEAT loops.
- CevalHelper** Changed by DTHOMPSON at 18-Jul-79 23:06:37 from CEVAL
Modified to use the AutoCases flag if case analysis can be performed.
- cases** Changed by DTHOMPSON at 18-Jul-79 23:30:50 from THEOREMPROVER
modified so the AutoCases flag could use the cases command.
- ReadUserProfileFile** Changed by DTHOMPSON at 22-Jul-79 23:04:07 from AFFIRMEXEC
modified to remember the getjfn file pointer returned by the INFILEP, so the OPENFILE won't have to recompute it. Totally internal efficiency change, user shouldn't see any change whatsoever.
- redoFilePointers** Changed by RBATES at 23-Jul-79 22:35:04 from REQUEST
redoFilePointers checks to see if the user is on PVMAINTAINERS. If not issues an error.
- UpdateCommandNames790724**
Changed by DTHOMPSON at 24-Jul-79 00:43:53 from NEW
This function is a dummy to update the CommandNames list, at system build time. It should not be included in the system files, but instead should be executed ONCE, and then the resultant value of CommandNames becomes the correct one to save for the new system.

definedEntryName? Changed by DTHOMPSON at 26-Jul-79 23:03:15 from AFFIRMEXEC modified to use an extended spelling correction routine. The effect is that SHORT FORMS for profile entry names are now allowed. For example, typing " TLW " for " TerminalLineWidth " is ok. The system expands TLW into the correct name. In addition, the user can add escapes, " \$ " , to stand for an arbitrary number of characters in a name, as for example " Term\$Line\$W\$ " for " TerminalLineWidth " . Casing is still totally ignored.

SuperSpell

Changed by DTHOMPSON at 26-Jul-79 23:06:43 from NEW
This is the extended spelling correction routine. It is called with 7 parameters, the first 5 of which are exactly what the more basic spelling correction routine (" AFFIRMSpellingCorrect ") is called with. The last two are denoted prefix and suffix, respectively. The basic algorithm first calls the basic spelling correction routine to attempt to respell the misspelling, where the misspelling is the concatenation of prefix, the first parameter (which is the misspelling in the basic respelling corrector) , and the suffix. If that succeeds, then the respelling is returned, exactly as in the basic spelling corrector. If it fails, then, one by one, three different modifications are made to the misspelling kernel (i.e., just the first parameter; the prefix and suffix are not modified) . Each modified kernel is then handed to the basic spelling corrector, with the prefix and suffix concatenated around it, and the normal algorithm is tried. If any of these succeed, the resulting respelling is returned. If none succeed, then as a last resort to get the darn thing respelled, if the 4th parameter, corresponding to the " dontAskUser " parameter of the basic spelling corrector routine, is NIL (i.e., DO ask user) , the basic spelling corrector is called again, this time with user interaction enabled, and the user will be asked to respell the misspelled word. Otherwise, the routine returns the value of the 3rd parameter, corresponding to the basic spelling corrector's 3rd parameter, " DefaultValue " . The three modifications are: (1) add escape to end of kernel; (2) insert escapes before each capital letter of kernel (so caps of short forms ARE important; this part is up for lots of re-evaluation!) ; and (3) add escape to end of the result of (2) . comments as to the desirability / worth of this extended scheme are hereby solicited. Should there be (yet another!) profile entry that says ALWAYS use extended, or NEVER?

appendEscape

Changed by DTHOMPSON at 26-Jul-79 23:10:40 from NEW
used by extended spelling corrector. Adds escape to end of its parameter.

- InsertEscapes** Changed by DTHOMPSON at 26-Jul-79 23:10:59 from NEW used by the extened spelling corrector. Insert escapes into its parameter, using the capitalization of the atom's characters as follows: (1) FIRST character: If the first character is LOWER, prefix it with an escape. (2) REMAINING characters: for each character, if it is UPPER, prefix it with escape. This algorithm works well for profile entries, which are typically conjoined words, the first letter of each word being capital. It may not be too swift for variable names, which are not so easily described, but the obvious method, simply putting an escape everywhere, was considered quite expensive in terms of the time spent in FIXSPELL, the basic routine at the bottom of all spelling correction (well, actually, CHOOZ!).
- Dtvs** Changed by RBATES at 29-Jul-79 23:09:13 from AFFIRMEXEC Modified Dtvs so that echo is restored each time threw the loop and now calls two new functions AffirmLoad and AffirmSave which load and save Interlisp files for Affirm.
- RequestFunction** Changed by RBATES at 29-Jul-79 23:09:49 from <AFFIRM>CPATCH-24.;1 Fixed a problem with the RequestFunction not thinking it has a function since the function was inside a block. This problem only occured when RequestFunction was called from the editor.
- findDefinition** Changed by RBATES at 29-Jul-79 23:10:28 from REQUEST Change message asking if the definition is correct or not.
- gripe** Changed by RBATES at 29-Jul-79 23:10:40 from AFFIRMEXEC Gripe now asks if you want to sndmsg or abort the message after you compose the message.
- AffirmLoad** Changed by RBATES at 29-Jul-79 23:13:10 from NEW This function now is called when the user exectues a load command. Takes as a optional parameter slow or fast. If the parameter is not supplied then uses the user profile entry LoadMethod. Fast means that the load is NOT undoable while slow means that it is.
- AffirmSave** Changed by RBATES at 29-Jul-79 23:13:48 from NEW This function does the save command for Dtvs. Takes as an optional parameter slow or fast. If the parameter is not supplied then user the user profile entry SaveMethod. Slow means to CLISPIFY the file while fast means don't bother to pretty print the file.

AffirmExec

Changed by DTHOMPSON at 31-Jul-79 23:46:11 from AFFIRMEEXEC
Modified to provide for initialization of the " LowerExec " flag. See
comments to DtvS.

DtvS

Changed by DTHOMPSON at 31-Jul-79 23:46:31 from
<RBATES>CPAT25.;10

Modified as follows: (1) a " LowerExec " flag, initialized by
AffirmExec, and incremented at the top of the DtvS function,
provides more explicit user notification that he or she is in a lower
exec. In addition, the value is used to monitor " ok ", " stop ", and
" abort " commands. (2) the " abort " command will not pop out of
the top-level DtvS. (3) the " end " command will not pop out of
the top-level type being edited (currently named " Basis ").
Instead, it prints a " you can't do that! " message. (4) the " lisp "
command checks the user profile entry " LispAccess " before it
drops you into LISP. Currently, the " e " command does NOT check
the entry, presumably because the two commands are really of a
different kind; " lisp " is much more pervasive than is " e ", which
is commonly used for date display, history display, etc. (5) the "
ok " command will not pop out of the top-level DtvS. (6) the "
stop " command will not pop out of the top-level DtvS. Perhaps this
shouldn't be the case: what about the file? But...???

Invoke

Changed by DTHOMPSON at 31-Jul-79 23:54:02 from
THEOREMPROVER

fixed a slight bug which caused the proof structure to record the
list of definitions provided by the user, rather than the possibly
smaller subset of definitions that are validated to actually appear
in the current proposition.

exec

Changed by DTHOMPSON at 31-Jul-79 23:54:33 from UTILITY
modified to get more pleasing output when no forks exist to create
an EXEC. Previously, the lisp system got to output some horrible
message. Now we do it (but it's prettier and more informative!).

forget

Changed by DTHOMPSON at 31-Jul-79 23:55:11 from UTILITY
modified to take the normal command function parameters " file "
and " stop ", so that " forget; " now works as a command.
However, it can also be called from code, with no parameters, and
is smart enough to not attempt to read to semicolon.

AffirmInitAfterMakesys

Changed by DTHOMPSON at 31-Jul-79 23:55:39 from UTILITY
modified to check the profile entry " BreakAccess " before it drops
you into LISP when you hit control-D. It also prints a message
telling you that that's what you just did.

- AFFIRMMAPRINT** Changed by DTHOMPSON at 31-Jul-79 23:56:04 from UTILITY modified to put header (its first parameter) and list (its second) on the same line, separated by a space, whereas previously the header was on a separate line.
- AFFIRMUSER** Changed by DTHOMPSON at 31-Jul-79 23:56:25 from UTILITY modified to output its optional terminating carriage return (its last [ninth?] parameter) to the current primary output file, instead of the terminal.
- readp** Changed by RBATES at 1-Aug-79 00:31:29 from PASCAL
If readp is supplied with no file name or a bad file name will prompt the user for a file name with TTYINFILE. Uses AFFIRMMAPRINT instead of MAPRINT, also.
- AffirmLoad** Changed by RBATES at 1-Aug-79 00:31:56 from <RBATES>CPAT25.;10
If supplied with no file or a bad file name will prompt the user for a file name until control-e is typed or given a file.
- DTVS** Changed by RBATES at 1-Aug-79 00:32:17 from AFFIRMEXEC
Print a message about which file it is reading from. Also prompts the user when read is given no file or the file name is not found.
- UpdateFunction** Changed by RBATES at 1-Aug-79 23:11:16 from REQUEST
Made a message a little clearer.
- UserProfile** Changed by DTHOMPSON at 3-Aug-79 00:15:34 from AFFIRMEXEC
modified to use OffValues rather than YesValues (or OnValues) . This subtle change makes calls to userprofile with third parameter T (i.e., make it Boolean) return NIL if the value is NIL, or is one of {No, Off, False}, and return T if the value is ANYTHING ELSE. Thus flags which have a possible value set of the normal on/off set (which is {Yes, No, On, Off, True, False}) , PLUS a few more values, can be checked for 'positive' value (i.e., not off) with the third parameter T. Before, the routine returned NIL for 'positive' values that were not equivalent to 'On'. In other words, it now does what you'd expect.

profile Changed by DTHOMPSON at 3-Aug-79 00:19:05 from <DTHOMPSON>UPFIX.;1
Internal modification that speeds up the works a bit: calls UserProfilePut rather than UserProfileSet. The latter is a publicized entry point, and does all the validation of the entry, value, etc. The former is not publicized (nor is it an entry point) , and it does NONE of the checking, under the assumption that it has all already been performed. the profile routine does that checking. The user should not notice any differences.

WriteUserProfileFile Changed by DTHOMPSON at 3-Aug-79 00:24:59 from AFFIRMEXEC
fixed a bug that Rod pointed out: profile files saving only changed entries were also saving all entries which had string valuw, because the check that determined if the value had changed used an EQ test, rather than an EQUAL test. Now uses the EQUAL test.

WriteUserProfileFile Changed by DTHOMPSON at 7-Aug-79 00:49:43 from <DTHOMPSON>UPFIX5.;1
modified to print the user profile in a little more readable manner,] by using the upper/lower case versions of the entry names, and by sorting the entries. Also modified to always write a file, even if it's empty, in order to avoid a subtle error that would cause the user that accepts all the defaults to not have a user profile file written at all. Unfortunately, the next time that user logs onto AFFIRM, the system will think he or she is brand new, rather than just complacent.

InitializeUserProfile Changed by DTHOMPSON at 7-Aug-79 00:50:36 from AFFIRMEXEC
modified to call the reinitializer at startup of a freeze (SYSOUT) file.

ReinitializeUserProfile
Changed by DTHOMPSON at 7-Aug-79 00:50:47 from NEW
a new function that re-establishes those profile entries that the system may have reset because of a sysout starting up. Basically, at sysout startup, this routine looks through the user profile entry definitions, and for each entry that has a side effect (the " AssociatedVariables " field of the database entry) , sets the current value to the current value, thus causing the side effect to occur. If there is no current value, the default value is used. This causes the sysout startup to use the profile value for line length, rather than the interlisp system's, for example.

getProfileAssociatedVariables

Changed by DTHOMPSON at 7-Aug-79 00:51:48 from AFFIRMEXEC modified to conform to published doc: the casing of the default value, " NoAssociatedVariables " , is now Immaterial: any casing will do.

getProfileConditions Changed by DTHOMPSON at 7-Aug-79 00:52:07 from AFFIRMEXEC modified to conform with published doc: the casing of the default value, " NoConditions " , is now Immaterial; any casing will do.

performAssociatedUpdates

Changed by DTHOMPSON at 7-Aug-79 00:52:21 from AFFIRMEXEC optimized. Should have no external effect on users or implementors using the function.

AffirmMakesys

Changed by DTHOMPSON at 7-Aug-79 17:01:27 from UTILITY modified to add advice to BREAK1 to use the user profile entry BreakAccess to decide if the user should actually get into a break.

next

Changed by DTHOMPSON at 7-Aug-79 17:02:14 . from THEOREMPROVER modified to improve smoothness of the output of the list of NEXT proposition numbers, by calling AFIRMMAPRINT, which pretty prints a list in English. Also NEXT now prints " (none!) " when there are no pending propositions, rather than not printing anything at all, as was its wont.

AffirmInitAfterMakesys

Changed by RBATES at 7-Aug-79 17:04:12 from <DTHOMPSON>PR3.;2
Now maps threw RESETFORMS and EVAL's each one.

CreatePatchFile

Changed by RBATES at 7-Aug-79 17:04:25 from NEW
Was called createPatchFile. Calls the editor at end to edit the coms of the master patch file.

VerifyRequest

Changed by RBATES at 7-Aug-79 17:04:48 from NEW
Used to be called verifyRequest.

CheckPoint

Changed by RBATES at 7-Aug-79 17:04:54 from NEW
used to be call checkPoint. The files it creates are of the form backname.*.

redoFilePointers

Changed by RBATES at 7-Aug-79 17:05:22 from <RBATES>CPAT25.;10
now calls CheckPoint instead of checkPoint and VerifyRequest instead of verifyRequest.

Infix Changed by RBATES at 7-Aug-79 17:08:21 from SPECIFICATION
Uses the shorten name instead of the full name. This change goes
along with the new infixprint.

Infix Changed by RBATES at 7-Aug-79 17:08:44 from SPECIFICATION
uses the shorten names instead of the full names. Goes along with
the new infix print.

renamePrefixOp Changed by RBATES at 7-Aug-79 17:10:15 from PARSEHELPER
Uses the new IO operators instead of the xeval operators.

renameInfixOp Changed by RBATES at 7-Aug-79 17:10:24 from PARSEHELPER
Uses the new IO operators instead of the Xeval operators.

Changes to version 24

These functions have changed:

InitDtls	Changed by RBATES at 2-Jul-79 00:20:30 from <RBATES>CPAT24.; 1 Added a call to DefaultUserProfile.
InitXevalDtls	Changed by RBATES at 2-Jul-79 00:20:44 from <RBATES>CPAT24.; 1 moved the call of DefaultUserProfile to InitDtls.
RequestFunction	Changed by RBATES at 2-Jul-79 00:20:56 from <RBATES>CPAT24.; 1 During system building uUpdateFunction won't get called any more.

Changes to version 23

These functions have changed:

- Dtvs** Changed by DTHOMPSON at 25-Jun-79 22:58:24 from AFFIRMEXEC
Dtvs was modified to allow pascal comments {...} in command position. This allows comments at the beginning of input lines, and immediately after semicolons (which is really the beginning of the NEXT input line) . c
- genvecs** Changed by DTHOMPSON at 25-Jun-79 22:59:08 from PASCAL
modified to swap the printout of the " <number><status> " message and the pretty-print of the proposition, so as to conform with other parts of the system. Also, added spelling correction to the program unit names. It's a little more flexible!
- skipPascalComment** Changed by DTHOMPSON at 25-Jun-79 22:59:58 from NEW
This routine does the skipping until right curly bracket, do skip over Pascal comments. It assumes the left curly bracket has already been seen. It uses the input file provided as its parameter, and uses READC's, thus not needing a read table.
- ReduceRespellingsInteractively**
Changed by DTHOMPSON at 25-Jun-79 23:04:12 from AFFIRMEXEC
modified to add the missing left paren in the message saying that the system automatically respelled a misspelled word.
- RemoveRule** Changed by DTHOMPSON at 26-Jun-79 00:51:53 from REWRITERULE
Modified to give pretty printer more of the line width to work with in printing the rule being discarded. This is being changed in conjunction with the printout format changes to Completer and AddRule, to fix the ASKUSER calls and generally spruce up output a (tiny) bit.
- InitializeAffirmReadTable**
Changed by DTHOMPSON at 26-Jun-79 23:18:32 from NEW
a new function to initialize the pascal read table.
- EditTheorem** Changed by ERICKSON at 27-Jun-79 17:18:19 from TEDIT
minor: calls getPrettyNorm so won't recompute (RemoveIfsQ AfterNorm) if it already exists.

AddCommand Changed by DTHOMPSON at 27-Jun-79 22:26:32 from NEW
This routine performs the necessary variable updates to incorporate a new command into the spelling correction command list, etc. The routine checks for an associated function with parameters FILE and STOP. It reports its findings (yes, there is one; no there isn't) to the caller. NOTE: the routine does NOT perform any PERMANENT command addition; each time you start up a new AFFIRM, you'll have to rerun AddCommand, until your new command is added to the system during a system build. CALLING SEQUENCE: (from AFFIRM EXEC: e AddCommand (<list of command names>) there is no current need for the routine to worry about parameters to the command, but it will when centralized input happens. If the list of command names is NIL, AddCommand prompts the user for a list. Any casing will do, AddCommand lowers it before processing.

DeleteCommand Changed by DTHOMPSON at 27-Jun-79 22:29:56 from NEW
This routine deletes a (list of) command (s) provided to it as its parameter. Any casing will do, it lower cases it before processing. It's robust enuf to handle the case that the command is NOT a command. calling sequence: e DeleteCommand (<list of command names>)

CleanupFunction Changed by RBATES at 28-Jun-79 22:36:03 from REQUEST
removed a variable bounded but never used.

GenIndex Changed by RBATES at 28-Jun-79 22:36:38 from UTILITY
Fixed a problem with functions that belong on two files. This can happen since by copying a function to another file it is a easy way to to place into a block.

RequestFunction Changed by RBATES at 28-Jun-79 22:37:43 from REQUEST
Modified the call to UpdateFunction so it passes along what affirm file the function belongs to.

UpdateFunction Changed by RBATES at 28-Jun-79 22:37:54 from REQUEST
Added a new optional parameter AffirmFile which is the affirm file to which the function belongs to. Also have added a call to the new function findDefinition.

WhatChanged Changed by RBATES at 28-Jun-79 22:38:25 from REQUEST
removed a variable bounded but never used.

cleanupRequest Changed by RBATES at 28-Jun-79 22:38:34 from REQUEST
fixed a problem in modifying the file PreviousVersion.

- findDefinition** Changed by RBATES at 28-Jun-79 22:38:46 from NEW
This function worries about if the system has the right definition for the function. If the system has no definition for a function, it will automatically load the function using the variable FULLSYSFILES. If the system has the possibly of having the right definition in core then an ASKUSER call is done to determine whThis function worries about if the system has the right definition for a particular function. If the system has no definition for a function, then it will automatically load the function using the variable FULLSYSTEMFILES. If system has the possibly of having the right definition in core then an ASKUSER call is done to determine wheter or not to redefine.
- getComment** Changed by RBATES at 28-Jun-79 22:40:22 from REQUEST
removed a variable bounded but never used.
- ApplyAllEqHyps** Changed by MUSSER at 28-Jun-79 23:44:16 from NEW
New function used in new implementation of REPLACE command.
See comment in the code.
- ApplyEqHyp** Changed by MUSSER at 28-Jun-79 23:45:51 from NEW
New function used in new implementation of REPLACE command.
See comment in the code.
- GetConjunct** Changed by MUSSER at 28-Jun-79 23:46:22 from NEW
Ne function. Arguments are (x l) , where x is a predicate expression, l is a positive integer. Result is the l-th conjunct in x, where the conjuncts are numbered from left to right in print order. If there are fewer than l conjuncts, result is NIL.
- IsEq** Changed by MUSSER at 28-Jun-79 23:47:33 from NEW
New function, part of transition to new treatment of equality. Argument is op, an atom. Returns T if op is an equality operator, NIL otherwise.
- ReadExpressionList** Changed by MUSSER at 28-Jun-79 23:48:43 from NEW
New function. Arguments are (file stop) . Reads a non-empty sequence of expressions from file, terminated by the symbol stop. Performs error exit if syntax or interface error occurs.

- replaceCommand** Changed by MUSSER at 28-Jun-79 23:49:36 from THEOREMPROVER
New implementation of theorem prover command REPLACE. Corrects problem of substitutions being blocked by hypotheses that are implications. Extends the command to permit an optional list of expressions as arguments. These arguments form the ReplaceList used to control exactly which substitutions get made. If the ReplaceList is empty, all equality hypotheses are used to make RHS for LHS substitutions (as before). If it is not empty, and LHS=RHS is a hypothesis to an implication, then if LHS occurs in ReplaceList, the substitution RHS for LHS is made; otherwise, if RHS occurs in ReplaceList the substitution LHS for RHS is made; otherwise, neither substitution is made.
- DefaultUserProfile** Changed by DTHOMPSON at 29-Jun-79 00:50:11 from AFFIRMEXEC
Modified to not take a parameter, which it wasn't using anyhow. The parameter was UserName, so that we could do individual things during the initialization of the profile values to their defaults. But this routine is now being called during system build, and just what user will start up the system is kinda hard to tell at that point...
- InitializeUserProfile** Changed by DTHOMPSON at 29-Jun-79 00:51:52 from AFFIRMEXEC
Modified to no longer call DefaultUserProfile, 'cuz by the time InitializeUserProfile is called, the Defaults will already have been provided.
- InitXevalDtv** Changed by DTHOMPSON at 29-Jun-79 00:52:13 from UTILITY
Modified to call DefaultUserProfile, in order to initialize the system defaults at system build time.

Changes to version 22

These functions have changed:

ChooseASymbol	Changed by ERICKSON at 14-Jun-79 17:15:34 from LOGIC Now checks whether it is given NIL as a variable. This used to give us (RPLACA NIL &) ; now it's caught and gives an error.
NewSymbolFrom	Changed by ERICKSON at 14-Jun-79 17:16:27 from LOGIC Checks for NIL variable; see ChooseASymbol
GenIndex	Changed by RBATES at 14-Jun-79 23:27:59 from UTILITY Fixed GenIndex to work with either Hash Whereis system or a normal system.
MAKESYSTEM	Changed by RBATES at 14-Jun-79 23:28:14 from UTILITY Move some of the Hash Whereis stuff to NoteFiles.
NoteFiles	Changed by RBATES at 14-Jun-79 23:28:34 from REQUEST Has stuff for the Hash Whereis system, that was in MAKESYS.
TypeFile	Changed by RBATES at 14-Jun-79 23:28:46 from NEW An old function that was not included in the last big change. It just copies a file to the tty:.
cases	Changed by RBATES at 14-Jun-79 23:29:08 from THEOREMPROVER Just added a call to CheckForSuccess. This makes sure that the T.P. knows what cases did.
cleanupRequest	Changed by RBATES at 14-Jun-79 23:29:44 from NEW This is the first release of a function that cleanup the Request package after a system is built. It still need some work.
gripe	Changed by RBATES at 14-Jun-79 23:30:01 from AFFIRMEXEC Fixes a problem with gripe, that made the call to NotifyMaller not work. This problem was a direct result of the new way USERNUMBER is done.
suppose	Changed by ERICKSON at 15-Jun-79 17:45:07 from THEOREMPROVER uses CheckForQexpression.
supersearch	Changed by ERICKSON at 15-Jun-79 17:45:15 from THEOREMPROVER uses Instance?
search	Changed by ERICKSON at 15-Jun-79 17:45:19 from THEOREMPROVER uses Instance?

let Changed by ERICKSON at 15-Jun-79 17:45:22 from THEOREMPROVER
uses CheckForQexpression.

complete Changed by ERICKSON at 15-Jun-79 17:45:44 from THEOREMPROVER

choose Changed by ERICKSON at 15-Jun-79 17:46:09 from THEOREMPROVER
nCheckForQexpression added.

augment Changed by ERICKSON at 15-Jun-79 17:46:14 from THEOREMPROVER
Fixed the bug in " augment FALSE; " by bypassing Instance when we have an atom (otherwise instance and InstanceQ do a (create -- using --) which grabs garbage.

CheckForQexpression

Changed by ERICKSON at 15-Jun-79 17:46:42 from NEW
Causes an error unless its argument is a Qexpression.

Instance?

Changed by ERICKSON at 15-Jun-79 17:46:46 from NEW
If given something other than a Qexpression, returns it; otherwise calls Instance. Useful where you aren't sure of someone's structure.

Completer

Changed by MUSSER at 18-Jun-79 00:44:18 from LOGIC
Changed to print trace information about the checking of rules for unique termination and generation of new rules. Prints " m/n " when checking the m-th rule among a total of n rules to be checked. Prints " ! " whenever a pair of rules are found to have a critical pair. Prints " . " when a pair of rules are found that have operators in common.

EqvFromIf

Changed by MUSSER at 18-Jun-79 00:47:43 from NEW
New function that will be used in new treatment of equality operations. (Called by Completer.) Argument, x, is assumed to be of the form (IfThenElse p q r) . Returns the equation (p eqv(If (q eqv not r) the q else p)) (where RHS is simplified: note that If (q eqv not r) simplifies to TRUE then result is (p eqv q) ; otherwise the result is a conditional equation) .

AffirmSysoutInit

Changed by DTHOMPSON at 18-Jun-79 17:04:46 from UTILITY
Modified to invoke the User Profile initialization routine, which knows whether or not this is the first time, or is from a freeze.

profile

Changed by DTHOMPSON at 18-Jun-79 17:05:46 from NEW

This routine is the command routine for the User Profile mechanism. If its parameter list is NIL, it invokes the profile dialogue. If its parameter list is non-NIL, it is interpreted as a series of profile entry names, separated by commas. Each entry name can optionally be followed with a new value, or by a question mark, signifying that the current value is to be output. For more information, see the handout provided at the PV meeting of 790619.0

UserProfile

Changed by DTHOMPSON at 18-Jun-79 17:07:20 from NEW

This is the query handler that should be called in the code. It takes two parameters, the entry name whose current value is to be retrieved, and a boolean flag which tells whether or not to map the retrieved value into boolean or not. Flag = T means maps into Boolean, otherwise just return current value as is. If the entry has no value currently, NIL is returned. Most flags are of the on/off variety, so the flag is useful. Please see the handout on the profile mechanism.

UserProfileSet

Changed by DTHOMPSON at 18-Jun-79 17:08:55 from NEW

This is the value modification routine to be called from code. It takes three parameters, the entry name (in any casing), the new value, and an error flag. The value is validated as a legal value for the entry name, and if so, is stored. If the value is NOT legal, the third parameter tells whether or not to tell the user. FFlag=T=DONT tell the user; NIL means tell.

InitializeUserProfile

Changed by DTHOMPSON at 18-Jun-79 17:09:36 from NEW

This is the initialization routine, which initializes the profile to default values, and then reads in the profile file (s). It knows about first time vs sysout startup after freeze, and acts accordingly.

APE

Changed by DTHOMPSON at 18-Jun-79 17:09:57 from NEW

This routine Adds Profile Entries to the database, prompting the user for fields. A response of "] " (right square bracket) causes the normal default to be filled in. The routine also asks you for the name of the 'group' or 'family' this profile entry should be added to. type ? to get a list of current names.

APG

Changed by DTHOMPSON at 18-Jun-79 17:10:33 from NEW

This routine Adds Profile Groups to the database. It prompts the user for field contents. The name is an atom; the display name is a STRING, and MUST be in double quotes. The routine asks where the new group should be positioned in the current sequence of groups; type ? to obtain your current choices.

- OKtoUseCOMS?** Changed by DTHOMPSON at 18-Jun-79 17:11:03 from NEW
This routine is a PLACEHOLDER for a set of file-handling routines which worry about re-using COMS, initializing COMS, etc.
- getFileName** Changed by DTHOMPSON at 18-Jun-79 17:11:22 from NEW
This routine performs the minimal function of reading an atom which is supposedly a filename. It is a PLACEHOLDER for a function badly needed, which will be written soon. Please see comments to "OKtoUserCOMS? " .
- makeFileName** Changed by DTHOMPSON at 18-Jun-79 17:11:54 from NEW
This routine actually worries about creating a file name from an atom name, inserting control-v's as needed for TOPS-20.
- markFileNameAsUsed** Changed by DTHOMPSON at 18-Jun-79 17:12:14 from NEW
Please see comments to routine " OKtoUseCOMS? " .
- setGCmessage** Changed by DTHOMPSON at 18-Jun-79 17:12:20 from NEW
This routine resets the format of the garbage collection message using the profile. try it and see!
- setGCpages** Changed by DTHOMPSON at 18-Jun-79 17:12:31 from NEW
This routine resets the garbage collection page variable below which the " ...pages left " message is output.
- ListRules** Changed by DTHOMPSON at 18-Jun-79 17:13:13 from SPECIFICATION
Modified to follow the 65 rule, whereby if the LEFT side of a rule takes up more than 65 of the line, the RIGHT side is placed on the next line. Otherwise, the RIGHT side is started on the same line. The 65 figure is the default value of a user profile entry, so the user can reset it to any percentage whole number (between 0 and 100) .
- InitXevalDtv** Changed by RBATES at 18-Jun-79 22:22:21 from UTILITY
Added (XSet EQVOP EQV\Boolean) to the function. This will cause EQV to be lowercase and infix when printed.
- verifyRequest** Changed by RBATES at 18-Jun-79 22:22:50 from REQUEST
Fix a problem with counting NEW files in the reference counters.
- Completer** Changed by RBATES at 18-Jun-79 22:23:10 from <MUSSER>JUNK.;
3
Changed the FreeVars call to be Frees calls, which fixed a problem. Question: Should all the FreeVars calls be changed to Frees calls?

deleteEntryFunction Changed by RBATES at 18-Jun-79 22:23:47 from REQUEST
Changed the deleteEntry call to putEntry, a minor change.

redoFilePointers Changed by RBATES at 18-Jun-79 22:24:06 from REQUEST
Call new function checkPoint.

RequestFunction Changed by RBATES at 18-Jun-79 22:24:16 from REQUEST
If RequestFunction is given NIL then the function it is interested in will be set to LASTWORD (that is the way EDITF works) . If it is beening called from EDITF and the function does not a definition, the RequestFunction call will print a message and return . The user is supposed to decide if he wants to own the function to stop the EDITF and restart with the right name.

deleteEntryFile Changed by RBATES at 18-Jun-79 22:25:30 from REQUEST
changed the call from deleteEntry to putEntry. deleteEntry is no longer needed.

checkPoint Changed by RBATES at 18-Jun-79 22:26:25 from NEW
New function that does a checkpoint for the request package. It works by doing a COPYHASHFILE.

EqvFromIf Changed by RBATES at 18-Jun-79 22:26:42 from
<MUSSER>NEWEQUAL.;3
Used by Completer

Changes to version 21

These functions have changed:

AffirmMakesys Changed by RBATES at 12-Jun-79 22:45:30 from
<RBATES>SYSTEMPATCH.;10
The system now uses a HASH whereis schema (Section 24 page 34) . AffirmMakesys stores the WHEREIS.HASH file into the file WHEREIS-##.HASH where ## is the version of affirm ythat the MAKESYS is for.

CleanupFunction Changed by RBATES at 12-Jun-79 22:48:32 from
<RBATES>SYSTEMPATCH.;10
Now uses the extended version of WHEREIS.

MAKESYSTEM Changed by RBATES at 12-Jun-79 22:48:40 from
<RBATES>SYSTEMPATCH.;10
Now has arguments List, Question1, and Question2. If List=NIL then we are doing a SYSLOAD of the files on the variable PV\SYSTEM\FILES. Also if we are doing a SYSLOAD we will put enough information on the prop list so that the EDITOR and PRETTYPRINTER can find out where a function is and not ask the user. This function stores the hash whereis on the file TEMP.HASH which gets copied by AffirmMakesys. Question1 and Queslton2 can be NIL, YES or NO. If NIL then user is asked the Question. If YES or NO then the user is not asked the question and the approlate thing is done.

affirmWhereis Changed by RBATES at 12-Jun-79 22:48:25 from
<RBATES>SYSTEMPATCH.;10
Uses the extended WHEREIS now.

forget Changed by RBATES at 12-Jun-79 22:48:34 from
<RBATES>SYSTEMPATCH.;10
New function that does the same thing as the LISPXCOMMAND forget.

exec Changed by RBATES at 12-Jun-79 23:26:14 from UTILITY
Made sure that the output went to the tty: and not the primary output file.

quit Changed by RBATES at 12-Jun-79 23:26:25 from UTILITY
Made sure that the output went to the tty: and not the primary output file.

Changes to version 20

These functions have changed:

- Chainings** Changed by MUSSER at 24-Apr-79 22:09:31 from UNIFICATION
Modified to eliminate duplicates in the list of substitutions computed.
- Chainings1** Changed by MUSSER at 24-Apr-79 22:12:28 from NEW
This is the old Chainings function.
- Define** Changed by MUSSER at 25-Apr-79 17:53:51 from DTVS
Modified so that the right hand side of the definition is EVALed before the definition is stored. This causes all and some quantifiers to be replaced by the given/find list form, which in turn gets rid of a problem of not properly renaming bound variables, e.g. define $f(x) = \text{some } y (P(x,y))$ would produce $f(y) = \text{some } y (P(y,y))$, but now will produce the correct result, $f(y) = \text{some } y' (P(y,y'))$ (or, actually, $f(y) = \text{find } y' (y) \text{ free } y : P(y,y')$).
- ReadRest** Changed by MUSSER at 25-Apr-79 21:16:42 from DTVS
Modified so that it returns the list of tokens (atoms) between the command name and the closing semicolon.
- search** Changed by MUSSER at 25-Apr-79 21:20:38 from THEOREMPROVER
Modified to output the substitutions being constructed (to the terminal) for possible selection by the user in a subsequent CHOOSE command. Also a new format is used to give a clearer picture of the search space.
- TryChainingsAndNarrowings** Changed by MUSSER at 25-Apr-79 21:23:47 from UNIFICATION
Changed to implement the changes to the SEARCH command output format. Also is more efficient since duplicate substitutions are no longer produced.
- ChooseChainingsAndNarrowings** Changed by MUSSER at 25-Apr-79 21:53:15 from NEW
New function used by CHOOSE command to reconstruct and make specified substitution.

- choose** Changed by MUSSER at 25-Apr-79 22:20:35 from NEW
This is a new function implementing a new command, CHOOSE $\langle \text{substitutionSpecifier} \rangle$; where $\langle \text{substitutionSpecifier} \rangle$ is a sequence of positive integers separated by blanks or commas, indicating one of the substitutions listed by the SEARCH command. The substitution is made in the CurrentSubgoal and the resulting formula is printed and becomes the new CurrentSubgoal. The substitution is recorded in the ProofStructure as though it had been made by a PUT command. This command is undoable.
- replaceCommand** Changed by MUSSER at 26-Apr-79 22:17:30 from DTVS
Modified so that the REPLACE command records recorded in the ProofStructure.
- complete** Changed by MUSSER at 26-Apr-79 22:18:28 from REWRITERULECOMPLETION
The " predicate " entered the ProofStructure to record the use of the COMPLETE command is " --- " rather than TRUE. The use of TRUE made it possible for some commands to be incorrectly recorded in the ProofStructure.
- cases** Changed by MUSSER at 26-Apr-79 22:19:35 from DTVS
The " predicate " entered in the ProofStructure to record the use of the CASES command is now " ---- " rather than TRUE. See comment on change to " complete " .
- augment** Changed by ERICKSON at 3-May-79 17:00:28 from NEW
The augment command is roughly similar to use and suppose. If the current result is $H \text{ imp } C$, and you say " augment A " , two subgoals are produced: $(H \text{ and } A) \text{ imp } C$, and $H \text{ imp } A$. A may contain locally quantified variables. Any which are free must be 'given' in the current result, for soundness reasons. (Note that this is closer to " suppose " than " use " .) This is intended to facilitate the introduction of facts which follow from the hypotheses.
- Split** Changed by ERICKSON at 3-May-79 17:02:03 from THEOREMPROVER
Split takes a list of subgoals. If they are not already quantified, it now uses the quantification in AfterNorm.
- SplitIntoSubgoals** Changed by ERICKSON at 3-May-79 17:02:29 from THEOREMPROVER
One may now simply say (SplitIntoSubgoals qex) to get the fragments; the use of (SplitIntoSubgoals qex:expr qex) is now optional.

split Changed by ERICKSON at 3-May-79 17:03:10 from THEOREMPROVER
Uses the new forms of Split and SplitIntoSubgoals.

suppose Changed by ERICKSON at 3-May-79 17:03:15 from THEOREMPROVER
New forms of Split and SplitIntoSubgoals.

employ Changed by ERICKSON at 3-May-79 17:03:25 from THEOREMPROVER
New form of Split.

CheckForPropositionStatus

Changed by MUSSER at 4-May-79 00:44:00 from THEOREMPROVER
Added " basis " as one of the status names accepted as being a proposition. Thus a USE of an entry marked as a basis assumption now works.

ZapRule

Changed by MUSSER at 6-May-79 22:58:15 from DTVS
Fixes a bug in the DISCARD command that caused too much to be discarded. Same bug caused IH to print as NIL in schemas sometimes.

InstanceQ

Changed by ERICKSON at 7-May-79 17:06:52 from NEW
A small piece of code which commonly appears where Instance is used. Returns a Qexpression, properly Instance'd.

CevalHelper

Changed by ERICKSON at 8-May-79 17:21:21 from CEVAL
If case analysis can be applied, only prints a message; does not ASKUSER.

reclaim

Changed by ERICKSON at 10-May-79 17:39:02 from THEOREMPROVER
Fixed so GetPredicate won't get confused, keep proper format of TheoremList.

RootOf

Changed by ERICKSON at 11-May-79 00:28:34 from THEOREMPROVER
Changed the algorithm to speed large cases. (Factor of 100!)

Roots

Changed by ERICKSON at 11-May-79 00:28:50 from THEOREMPROVER
Changed to speed large cases.

SubProofNumbers1 Changed by ERICKSON at 11-May-79 00:29:02 from THEOREMPROVER
Now does a REMOVEDUPLICATES on its result, for speed in SubProofNumbers.

Dtvs Changed by DTHOMPSON at 24-May-79 22:28:18 from AFFIRMEXEC
Dtvs now calls a prototype of an AFFIRM spelling corrector. Thus this version of Dtvs will perform spelling correction on command words, interacting with the user as is necessary.

AFFIRMMAPRINT Changed by DTHOMPSON at 24-May-79 22:33:07 from NEW
AFFIRMMAPRINT is a specialized version of MAPRINT that first prints some optional heading message on one line, and then prints the list of items separated by commas, with the LAST item preceded by " , and " . (And even that's optional: an optional parameter allows whatever you want.) Thus the list 'a b c x', along with the header 'did you mean one of the following?', would be printed as did you mean one of the following? a, b, c, or x (providing 'or' as the optional last separator. AFFIRMMAPRINT is used by the spelling corrector interactions.

AFFIRMUSER Changed by DTHOMPSON at 24-May-79 22:35:04 from NEW
AFFIRMUSER is a specialized version of ASKUSER that, so far, simply performs a carriage return after the ASKUSER interaction.

AFFIRMSpellingCorrect Changed by DTHOMPSON at 24-May-79 22:35:24 from NEW
The spelling correction routine. It determines a list of possible respellings that match within some percentage (currently 60), and asks the user to indicate which if any of these choices s/he really meant. (User interaction/notification is controlled via parameters.) The user can answer " / " , meaning none of the choices, in which case the spelling corrector asks again, this time with the whole list of choices. The user can then re-type the misspelled word (under ASKUSER control -- 'bad' characters are echoed with bells, and escape fills out unique portions of words; no confirmation is necessary) , or again reject all choices. The spelling corrector returns the respelling, if it was found, or NIL. The calling routine is expected to worry about the NIL case.

AFFIRMSpellingHelper1 Changed by DTHOMPSON at 24-May-79 22:37:21 from NEW
A sub-function of the spelling corrector that attempts to find a list of 'close' matches. Assumes no interaction with the user.

AFFIRMSpellingHelper2

Changed by DTHOMPSON at 24-May-79 22:37:53 from NEW
Same as AFFIRMSepellingHelper2, but assumes interaction with the user is OK (actually, both Helper1 and Helper2 have evolved during debug/play into the same routine, but just in case... they're currently treated as if they did different things.)

AFFIRMSpellingHelper3

Changed by DTHOMPSON at 24-May-79 22:38:43 from NEW
A sub-funtion of the spelling corrector. Handles case where the percentage match failed, and the whole list of possibilities is to be presented to the user.

Dtvs

Changed by DTHOMPSON at 24-May-79 23:05:13 from
<DTHOMPSON>CMDSPELL.;2
Modified the command name spelling corrector call to use NOTE as the default when the user rejects all possibilities. This way the 'skip to ;' is done.

AFFIRMSpellingCorrect

Changed by DTHOMPSON at 24-May-79 23:05:41 from
<DTHOMPSON>DTUTILITIES.;20
Modified the askuser calls to NOT be remembered on the history list. repeating the interaction with a misspelled word causes the interaction to be performed all over again. (is this reasonable??)

AFFIRMSpellingHelper3

Changed by DTHOMPSON at 24-May-79 23:06:06 from
<DTHOMPSON>DTUTILITIES.;20
Modified the askuser calls to not be remembered on the history list.

PrintDecIs

Changed by DTHOMPSON at 24-May-79 23:08:15 from
SPECIFICATION
Minor changes to the printing format to pretty up output.

declareVar

Changed by DTHOMPSON at 24-May-79 23:08:36 from
SPECIFICATION
along with minor changes to output format to make it prettier, changes to remove duplications from the decl id list were made. Also, if any supposedly new var ids are duplicates, if the user answers NO to the question 'redeclare?', the remaining vars, that were really new, are declared (the previous version didn't declare ANY of the vars if the user answered NO).

- redo** Changed by DTHOMPSON at 25-May-79 00:08:47 from AFFIRMEXEC
changed name of AFFIRMFIXFILE to " --AFFIRMFIXFILE-- ", to avoid completion conflicts with other file names in the user's directory.
- reclaim** Changed by ERICKSON at 25-May-79 00:50:54 from <ERICKSON>RECLAIM.;4
The semantics have been reversed. You now supply a list of the numbers of roots you wish deleted. They, and any descendants not used elsewhere, are smashed (NOT undoably) . Still asks the user for approval.
- AFFIRMSpellingCorrect** Changed by DTHOMPSON at 29-May-79 22:21:37 from <DTHOMPSON>DTUTILITIES.;21
...has been rewritten to smooth out output and to speed up the spelling correction process. It's still an EXPERIMENTAL thing: please (constructively) critique it!
- DetermineInitialRespellings** Changed by DTHOMPSON at 29-May-79 22:23:12 from NEW
computes for the spelling corrector an initial list of relatively close matches to the misspelled item.
- ReduceRespellingsNonInteractively** Changed by DTHOMPSON at 29-May-79 22:23:31 from NEW
the current algorithm for determining a respelling of a misspelled word when we can't ask the user is to see if the list of initial guesses returned by DetermineInitialRespellings has EXACTLY ONE item in it. If so, that item is the respelling. otherwise, we fail.
- ReduceRespellingsInteractively** Changed by DTHOMPSON at 29-May-79 22:24:20 from NEW
This routine determines a respelling by asking the user, providing an ASKUSER keylist of a list of guesses that match the misspelled item rather closely. The user is free to accept or reject these choices, in which case she/he is asked to retype the misspelled word.
- AFFIRMMaprint** Changed by DTHOMPSON at 29-May-79 23:50:03 from <DTHOMPSON>DTUTILITIES.;20
modified to reduce number of extra unneeded blank lines of output, by using the 'Reposition' function.
- AFFIRMUSER** Changed by DTHOMPSON at 29-May-79 23:51:39 from <DTHOMPSON>DTUTILITIES.;20
modified to use the 'Reposition' function.

Reposition

Changed by DTHOMPSON at 29-May-79 23:51:58 from NEW
This is one of those trivial printing functions that just jumps to a new line if we're not already there. It CHECKS to see, rather than just jumping(look before you jump, my mother always used to say...) It can be used as a normal function, or inside a printout form: " (printout NIL (Reposition) etc) " .

AFFIRMSpellingCorrect

Changed by DTHOMPSON at 30-May-79 00:20:08 from
<DTHOMPSON>SPELLER.;2
... I can't keep my hands off it! Modified to bind INTERLISP variable NOSPELLFLG, so that AFFIRM gets spelling correction even though the LISP system underneath may not. Fixed printout format of comments in the code; and smoothed out output to user, using 'Reposition'.

DetermineInitialRespellings

Changed by DTHOMPSON at 30-May-79 00:21:04 from
<DTHOMPSON>SPELLER.;2
fixed comments to pretty print nicely (just a code change, user won't see a thing different) .

ReduceRespellingsNonInteractively

Changed by DTHOMPSON at 30-May-79 00:21:18 from
<DTHOMPSON>SPELLER.;2
fixed comments to prettyprint nicely; smoothed out output by using 'Reposition'.

ReduceRespellingsInteractively

Changed by DTHOMPSON at 30-May-79 00:21:34 from
<DTHOMPSON>SPELLER.;2
see comments for 'ReduceRespellingsNonInteractively'.

gripe

Changed by RBATES at 3-Jun-79 23:43:42 from AFFIRMEXEC
If given a null subject gripe will now prompt the user for the subject.

setupDeclarations

Changed by RBATES at 3-Jun-79 23:44:02 from PASCAL
Fixed a problem in declaring variables Pascal instead of ProcedureCall.

Instance

Changed by MUSSER at 4-Jun-79 22:37:21 from LOGIC
Recorded_ to make it more efficient. Speeds up PUT, LET, and SEARCH commands.

OccursAsOperatorIn Changed by MUSSER at 4-Jun-79 22:39:47 from NEW

New function. Arguments are (atm exp) , where atm is a literal atom and exp is an expression. Returns T if atm occurs as an operator symbol in exp, NIL otherwise. Used in new version of Instance.

storage

Changed by ERICKSON at 4-Jun-79 23:27:05 from NEW

The " storage " command is intended to help smooth LISP's behavior when space gets tight. Its argument is one of {normal tight severe} (normal is the default) . It is intended that " normal " be used where space is not at a premium (and GCs should be minimized) , " tight " where one expects to hit bottom at some point in the session, and " severe " when approaching that limit. LISP's GC has, for each data type, a target level (MINFS) . If a GC of the type occurs, and less than MINFS free cells are available, more pages will be allocated. This command adjusts these targets. The command also changes the LISP history slice (to 2,5, or 30, respectively) . Only the slice part is automatically undoable. The MINFS targets are stored in the variable MinfsLevels, which has the format (... (type-name severe-level tight-level normal-level) ...) .

AddToFile

Changed by RBATES at 5-Jun-79 00:48:43 from UTILITY

Modify AddToFile so that it checks to make sure that list is not NOBIND.

AffirmInitAfterMakesys

Changed by RBATES at 5-Jun-79 00:53:55 from UTILITY

Killed the file package information about the ADVICE to EVALQT.

AffirmMakesys

Changed by RBATES at 5-Jun-79 00:54:09 from UTILITY

Fixed the herald in the MAKESYS.

CleanupFunction

Changed by RBATES at 5-Jun-79 00:54:16 from REQUEST

Added a new internal parameter, used during making a master patch file.

Dtvs

Changed by RBATES at 5-Jun-79 00:54:36 from AFFIRMEXEC

Killed additions to the spelling lists while inside of Dtvs. Turn back on while in a USEREXEC.

GenIndex

Changed by RBATES at 5-Jun-79 17:00:15 from NEW

Function that makes up the index for the Affirm sources book.

InitXevalDtvs

Changed by RBATES at 5-Jun-79 17:00:29 from UTILITY

Now has parameter used to set the MINFS for certain Interlisp types.

RequestFunction Changed by RBATES at 5-Jun-79 17:00:45 from REQUEST
Now has a internal parameter used during system building.

UpdateFunction Changed by RBATES at 5-Jun-79 17:00:58 from REQUEST
Warns the user if it can not find a patch file or it can only find the
top version of a patch file. Will now call ASKUSER if there is a
choice between the top version and a lower version.

askToOwn Changed by RBATES at 5-Jun-79 17:01:28 from REQUEST
Fixed a typo in the ASKUSER call.

createPatchFile Changed by RBATES at 5-Jun-79 17:01:32 from NEW
The function that makes the master patch file.

grantAccessFunction Changed by RBATES at 5-Jun-79 17:01:39 from REQUEST
Uses a new internal parameter to decide to call checkuser.

lockFile Changed by RBATES at 5-Jun-79 17:02:21 from REQUEST
Has better error handling when OPENHASHFILE fails.

putEntry Changed by RBATES at 5-Jun-79 17:02:35 from NEW
putEntry is a internal function to the Request package.

putEntryFile Changed by RBATES at 5-Jun-79 17:02:48 from NEW
putEntryFile is an internal function to the Request package.

putEntryFunction Changed by RBATES at 5-Jun-79 17:02:59 from NEW
putEntryFunction is an internal function to the Request package.

redoFilePointers Changed by RBATES at 5-Jun-79 17:03:06 from NEW
The function that updates the request package after a system
build.

systemBuild Changed by RBATES at 5-Jun-79 17:03:15 from NEW
Turns on and off the system building key. The system building key
tells the request package when it is ok to do a request.

systemCheck Changed by RBATES at 5-Jun-79 17:03:35 from NEW
The function that decides if a system build is in progress or not.

unUpdateFunction Changed by RBATES at 5-Jun-79 17:04:08 from NEW
removes the update state for a function.

verifyRequest Changed by RBATES at 5-Jun-79 17:04:22 from NEW
Verifys the request package is in a ok state. Returns T OR NIL.

Changes to version 16

These functions have changed:

- InitializeDataFiles** Changed by RBATES at 25-Mar-79 23:12:14 from NEW
This function initializes all the data files that the request package uses.
- SetupFile** Changed by RBATES at 25-Mar-79 23:38:00 from DTVS
SetupFile now print a message if you redefine a type.
- SetupXed** Changed by RBATES at 25-Mar-79 23:41:01 from DTVS
Fixed a bug, which caused the review command not to reuse or kill the fork for xed. SetupXed now does a kfork after every call.
- gripe** Changed by RBATES at 27-Mar-79 21:50:55 from INITDTV
Fixed a bug that caused part of the file " [--unsent-mail--]
.pvreport@isic " to be sent and deleted while gripe still needed the file.
- CheckLoad** Changed by ERICKSON at 28-Mar-79 21:35:35 from DTVS
Data-type files may be loaded into a SYSOUT without message;
only Affirm version matters.
- Dtvs** Changed by ERICKSON at 29-Mar-79 16:35:42 from DTVS
The " e " command now reads from dtvsfile instead of the terminal.
- CallEDITF** Changed by RBATES at 29-Mar-79 23:54:13 from DTVS
Now rebinds HOMEMACHINE to NIL so that the REQUEST package is off.
- NoteInterface** Changed by RBATES at 29-Mar-79 23:54:34 from
PATTERNCOMPILER
NoteInterface is now call at both makefile time and loading time. If
NoteInterface can not find a expr for its argument it will put one on
the property list. This fixes a bug with makefile printing a message
about it can not print a defn.
- NoteInterfaces** Changed by RBATES at 30-Mar-79 16:00:53 from
PATTERNCOMPILER
NoteInterfaces now has a extra argument for NoteInterface.
- OccursIn** Changed by RBATES at 30-Mar-79 16:01:10 from NEWVCGEN
OccursIn will not be block compiled by itself to speed things up.
- RequestFunction** Changed by RBATES at 30-Mar-79 16:01:21 from REQUEST
RequestFunction checks HOMEMACHINE to see if the REQUEST
package should be enabled or not.

SetupFile Changed by RBATES at 30-Mar-79 16:01:40 from
<RBATES>PATCH.;1
Now calls NoteInterface at makefile time.

gripe Changed by RBATES at 30-Mar-79 16:01:52 from
<RBATES>PATCH.;3
puts the AFFIRMVERSION in the subject field.

INFIX\PRINT Changed by RBATES at 30-Mar-79 16:02:06 from INFIX\PRINT
binds LISP HIST so that print don't eat up space.

INFIX\PRINT3 Changed by RBATES at 30-Mar-79 16:02:16 from INFIX\PRINT
binds LISPXHIST to NIL.

INFIX\PRINT4 Changed by RBATES at 30-Mar-79 16:02:23 from INFIX\PRINT
binds LISPXHIST to NIL. To fix a problem that caused Infixprint to
eat up space.

Changes to version 15

These functions have changed:

- gripe** Changed by RBATES at 18-Mar-79 22:43:39 from INITDTVS
Fixed a problem on TOPS-20 with the function not copying the users gripe to the transcript. Also fixed gripe so that it didn't need to use <AFFIRM>INTERLISP-GRIPES-AFFIRM.SAV anymore.
- setBlockE** Changed by RBATES at 18-Mar-79 22:44:30 from NEW
setBlockE is a new function that gripe uses. It deposits a number in StartBlockE plus a Offset.
- stringPack** Changed by RBATES at 18-Mar-79 22:45:08 from NEW
stringPack is a new function used by gripe. It takes a string and stores it in the freepage StartBlockE plus an Offset.
- AffirmExec** Changed by RBATES at 22-Mar-79 16:00:18 from NEW
This function is the right way to get from lisp to the Affirm toplevel. Checks to make sure that CurrentType is ok, if not calls (Edit 'Basis) .
- AffirmInitAfterMakesys** Changed by RBATES at 22-Mar-79 16:00:52 from NEW
The first function called after MAKESYS.
- AffirmMakesys** Changed by RBATES at 22-Mar-79 16:01:14 from NEW
The function that sets up the MAKESYS. Sets AFFIRMMAKESYSFILE (the file which the makesys is done to) , AFFIRMVERSION the version number of AFFIRMMAKESYSFILE and advises EVALQT to call AffirmInitAfterMakesys. If given a file name, won't reset AFFIRMMAKESYSFILE or AFFIRMVERSION.
- AffirmSysoutInit** Changed by RBATES at 22-Mar-79 16:02:46 from INITDTVS
This is function called when every a sysout or makesys starts up. Sets GOODGUY and AFFIRMSYSOUTFILE.
- exec** Changed by ERICKSON at 22-Mar-79 16:34:19 from NEW
This implements the Affirm command. Drops user into a lower EXEC; advice on SUBSYS causes transcripts to be saved and continued.
- quit** Changed by ERICKSON at 22-Mar-79 16:34:40 from NEW
Issues a LOGOUT] , returning user to higher exec. Advice on LOGOUT saves and restores transcripts. Affirm command.

saveproof Changed by ERICKSON at 22-Mar-79 16:35:06 from NEW
Saves some of the theorem-prover state on a file whose name the user provides. When the file is loaded, calls CheckLoad. Uses globally: PROOFVARS SYSTEMSTATECOMS. Saves: proof structure , propositions, and currency; switches.

transcript Changed by ERICKSON at 22-Mar-79 16:36:34 from DTVS
changed so DRIBBLE files are opened Append.

CheckLoad Changed by ERICKSON at 22-Mar-79 16:36:57 from NEW
Warns the user if a loaded file was created under a different version of Affirm or a different SYSOUT than the one into which it is being entered. Hooks exist to do further checking (such as current-type when loading a proof) , but are not used.

SetupFile Changed by ERICKSON at 22-Mar-79 16:37:39 from DTVS
Upon loading a type, CheckLoad is called

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