I. Glossary

Rule	An IF predicate, consisting of one or more typed components, and a THEN section, consisting of one or more actions. Rules are created by the ruleeditor and stored as ASCII text.
Message	A set of fields, with an optional unstructured section, that can be compared to Argus rules.
Folder	An internal representation of a collection of messages. Can be an open-ended stream or a close-ended set.
Translation Module	Translates externally-created messages into single, internally understood format. Keeps information specific to the message in a source-specific property.
Ruleset	A named collection of rules, stored as ASCII text in a file.
Message source	The source of a message, external to Argus. Sources could include: *mh*, *rmail*, *zephyr*, *discuss*, or *turnin/pickup*.
Rule server	A server that accepts both rules and messages. It runs rulesets over specified messages.
Message type	A pre-defined collection of fields in a message. A phone message might contain the fields: TO:, FROM:, CALLER:, PHONE NUMBER: and ACTION:.
mh	The Rand Mail Handler. Mail messages are stored in separate files in user directories. Access is via shell commands.
rmail	Mail system, accessible from emacs. Uses babyl mail format. Mail messages are stored in a single file.
zephyr	Athena's notice and transport message delivery system. Messages are not stored.
discuss	Athena's networked conferencing system. Messages are stored in "meetings" and may refer to other messages.
turnin/pickup	Athena's system for allowing students to turn in assignments to TA's or Professors, and pick up graded versions.
rule browser	Argus program. Allows users to view, print, rearrange, edit, add, delete, and copy rules in a ruleset.
registry	Internal argus function that provides a consistent interface for associating named pairs. Includes: message type registry, ruleset registry, action registry.
darray	Internal argus function that provides a consistent interface for storing internal data structures.
message traffic	Data collected about how often messages of each type are processed by which rules in which ruleset over a user-defined period of time.
rule activity	Data collected about how often rules are tested and fired in each ruleset over a user-defined period of time.
rule life	Data collected about additions, changes and deletions of rules.
predicate	The "IF" part of a rule. May evaluate one or more attributes of a message.
action	When the predicate of a rule is evaluated as "true", the "Then" part of a rule may perform one or more actions. Actions consist of a verb and a variable number of arguments.
attribute	The parts of a message tested by the "IF" part of a rule. Can included fields, properties or states.
field	An attribute of a message. The physical contents of a message, of the form: <field>: <value>. May be supplied by the sender, by the sender's message system, by the reciever's message system, by a rule action, or by the receiver through use of a text

	editor or other annotation system.
property	An attribute of a message. Three types: defined by user, supplied by originating message system and calculated about the message.
state	An attribute of a message. The state of processing of the current ruleset.
rule stream	ruleset or collection of rules.
message stream	folder or collection of messages.

II. Argus Profile

This profile is in: "... argus/argusprofile-source".

```
#--------------------------------------------------------------------
#
# Argus System Profile
#    File:       ... /argus/argusprofile.1.0
#    Update:     26 September 1989
#    By:         mackay@athena.mit.edu
#    Update:     1 October 1989
#    By:         rap@athena.mit.edu
#    Update:     12 October 1989
#    By:         rap@athena.mit.edu
#    Update:     13 October 1989
#    By:         rap@athena.mit.edu
#    Update:     14 October 1989
#    By:         rap@athena.mit.edu
#
#-------------------------------------------------------------------
#
# A user may specify his or her personal defaults by creating
#   a file in the home directory (~/.argus.profile) with a
#   any items that need to be changed.
#
#                          !!! WARNING !!!
#
#   If a .argusprofile file is created, this profile
#   component in that file MUST BE SET TO ANOTHER FILE NAME (most
#   likely a non-existant file such as $(HOME).argusprofile2).
#
NextProfilePath: $(HOME)/.argusprofile
#
#-------------------------------------------------------------------
#
# If this resource is set, Argus applications will set the UNIX
# environment variable XAPPLRESDIR to its value in order to facilitate
# use of global resource files when the Application specific class
# resource file directory (i.e. /usr/lib/X11/app-defaults) does not
# contain the Argus X resource file "Argus".  Please refer to the
# "INSTALLATION-NOTES" file.
#
XAppResourceFile: $(PLACE)/app-defaults
#
#-------------------------------------------------------------------
#
# The message types created by message type editor are stored in:
#
SystemMessageTypeRegistry: $(PLACE)/lib/msgregistry
#
#-------------------------------------------------------------------
```

```
#-------------------------------------------------------------------
#
# Look for message types in the following file.
#   Note:  this may be redundant and probably should be removed.
#
MessageTypeRegistryInit: $(PLACE)/lib/mtregistry.init
#
#-------------------------------------------------------------------
#
# Look for user’s argus files in the following directories.
#   (Note:  these are created automatically the first time
#   any Argus program is used.)
#
ArgusDirectory: $(HOME)/argus
RulesetDirectory: $(HOME)/argus/rulesets
#
#-------------------------------------------------------------------
#
# Save the user’s usage data in the following directories:
#   (Note:  the user can run the program "argusi" to turn
#   data collection on or off.)
#
DataDirectory: $(HOME)/argus/data
DataStateFile: $(HOME)/argus/data/argus.data
StartupDataStateFile: $(PLACE)/lib/argus.data
MsgDataOutput: $(HOME)/argus/data/msgtraffic.log
RuleActivityOutput: $(HOME)/argus/data/ruleactivity.log
RuleLifeOutput: $(HOME)/argus/data/rulelife.log
#
#-------------------------------------------------------------------
#
# Help button messages for Argus programs are stored in:
#
MessageDirectory: $(PLACE)/lib/messages
#
#-------------------------------------------------------------------
#
# Specify source of messages.  Current choices:  mh or RMAIL (RMAIL is
# the Babyl mail format).
#
MailUserAgent: mh
#
#-------------------------------------------------------------------
#
# Decide whether or not to save changed user properties and states:
#
SaveStates: False
SaveProperties: True
#
#-------------------------------------------------------------------
```

```
#-------------------------------------------------------------------
#
# The ruleeditor can present a simple or a complex view of fields:
#
DefaultRuleeditorMode: Simple
#
#-------------------------------------------------------------------
#
# The ruleeditor presents the menu of field types in the
#   following order:
#
#   (Note:  Text strings can be case sensitive or not
#   and can interpret commas either as "or" or ",",
#   resulting in four different text strings.
#   A future version should improve this.)
#
FieldTypePresentationOrder: Case Sensitive with Commas as ORs,
Case Insensitive with Commas as ORs, Date, Integer, Boolean,
Case Sensitive Text, Case Insensitive Text
#
#-------------------------------------------------------------------
#
# The ruleeditor displays fields from the following message type:
#
DefaultRuleMessageType: RULE
#
#-------------------------------------------------------------------
#
# The ruleeditor assumes the following defaults:
#
AddTextFieldType: Case Insensitive with Commas as ORs
DefaultFieldType: Case Insensitive with Commas as ORs
DefaultRuleVerbs: move to
#
#-------------------------------------------------------------------
#
# When in "simple" mode, the ruleeditor only shows operators for
#   the following field types:
#
FieldTypesThatShowOperators: Date, Integer
#
#-------------------------------------------------------------------
#
# The ruleeditor menu can display additional lines in the menu
#    so that the user doesn't need to go into "complex" mode.
#
EasyAccessFieldTypes:  Date
#
#-------------------------------------------------------------------
```

```
#-------------------------------------------------------------------
#
# The ruleeditor presents the menu of field types in the
#   following order:
#
#    (Note:  the "sendme" action is missing from this list because
#    anyone server is not included in this release.)
#
VerbPresentationOrder: move to,copy to,delete current message,
remail current message to,runrules,stop processing current message,
formatted shell command,shell with message as stdin,
shell with message body as stdin,set user property,
clear user property,add to user property,subtract from user property,
make user property temporary,make user property permanent
#
#-------------------------------------------------------------------
#
SnapShotOutput: $(HOME)/argus/data/data.snap
#
#
#-------------------------------------------------------------------
# ANYONE SERVER profile components.  Note that the anyone server is
# still in the experimental stage
#
AnyoneDropDirectory:  ... /argus/athena-anyone/drop
#
AnyoneLibDirectory: ... /argus/athena-anyone/lib
#
AnyoneName: athena-anyone
#
DefaultAnyoneServer: athena-anyone
#
#-------------------------------------------------------------------
```

III. Argus Resources

This X Resources file is in: "... argus/1.0/app-defaults/Argus".

```
!======================================================================
!======================================================================
!                         ARGUS RESOURCE FILE
!======================================================================
!======================================================================

! All integers for Argus X applications are expressed in 100th
! millimeters increments, except where otherwise noted, so that Argus
! X applications appear the same size on different displays.

! If you are curious about any of these resources, you can experiment
! with them by copying this global resource file into a file
! called ".Xdefaults", located in your home directory.  You can
! then edit individual resources and choose the ones you like
! best.
!
! If the Argus profile component 'XAppResourceFile' is set, it
! specifies a directory that contaubs a file called 'Argus', which
! contains these resources.  The UNIX environment variable
! XAPPLRESDIR is set to the value of that profile component if a value
! exists, otherwise XAPPLRESDIR is left unchanged.  In order to change
! these resources, you must copy the global argusprofile.1.0 into your
! home directory:  ~/.argusprofile.  Change your copy of the profile
! so that the 'XAppResourceFile' component specifies this (your
! home directory).
!
! Important: If you create your own copy of an argus profile, you must
! change the profile component 'NextProfilePath' to a value other than
! $(HOME)/.argusprofile (i.e.  change it to $(HOME)/.argusprofile2)).

! Most of the  following resources affect the Argus rule editor.
! After you change a resource, restart the ruleeditor from scratch.
! For example, you can't change a rule editor resource and then bring
! up another rule editor from the rule browser and have the resource
! take effect.  You'd have to start a new ruleeditor or rulebrowser.
!
! Note that the order of many of these resources is significant.
!
```

```
!======================================================================
!                         FONT SPECIFICATIONS
!======================================================================
!
! There are four major fonts used in Argus X applications.  Here are
! the four standard fonts and a set of alternative fonts
! (commented out) that also work well.
!
*argus-major-heading.fontList:
-adobe-new*-bold-r-normal--24-240-75-75-p-149-iso8859-1
! -adobe-times-bold-r-normal--24-240-75-75-p-132-iso8859-1

*argus-minor-heading.fontList:
-adobe-new*-bold-r-normal--18-180-75-75-p-113-iso8859-1
! -adobe-times-bold-r-normal--18-180-75-75-p-99-iso8859-1

*argus-buttons.fontList:
-adobe-new*-bold-r-normal--14-140-75-75-p-87-iso8859-1
! -adobe-times-bold-r-normal--14-140-75-75-p-77-iso8859-1

*argus-text.fontList:
-adobe-new*-medium-r-normal--14-140-75-75-p-82-iso8859-1
! -adobe-times-medium-r-normal--14-140-75-75-p-74-iso8859-1
!
!----------------------------------------
! This font is used for the argus popups.
Argus-dialogs*XmLabelGadget.fontList:
-adobe-new century schoolbook-medium-r-normal--14-140-75-75-p-82
-iso8859-1
! this is the font for the push buttons on Argus popup dialogs.
Argus-dialogs*XmPushButtonGadget.fontList:
-adobe-new*-bold-r-normal--14-140-75-75-p-87-iso8859-1

!----------------------------------------------------------------------
! Make sure that this font is monospaced.  This is used for popups
! which require a monospaced font.
! Monospaced popups
Argus-dialogs*argus-monospaced-popup.XmLabelGadget.fontList:
-adobe-courier-medium-r-normal--14-140-75-75-m-90-iso8859-1
!
Argus-dialogs*argus-monospaced-popup.XmPushButtonGadget.fontList:
-adobe-new*-bold-r-normal--14-140-75-75-p-87-iso8859-1


!======================================================================
!          RESOURCES WHICH CONTROL THE ARGUS POPUP DIALOGS
!======================================================================
! NOTE that these resources are in PIXELS and not 100th MILLIMETERS
! because of bugs in the Motif shell mechanism and resolution
! independence.
!
! controls the shadow thickness for the popup dialogs.
Argus-dialogs*shadowThickness: 3
! controls the highlight thickness for the popup dialogs.
Argus-dialogs*highlightThickness: 3
```

```
!=====================================================================
!=====================================================================
!                        RULE BROWSER RESOURCES
!=====================================================================
!=====================================================================
!This resource controls the border color of the rule browser.  This
! border color is also used as when creating the Pixmaps which
! surround each rule editor spawned from the rule browser.
!
#ifdef COLOR
rulebrowser*main-form.borderColor: DarkGrey
#else
rulebrowser*main-form.borderColor: white
#endif

!=====================================================================
!=====================================================================
!                        RULE EDITOR RESOURCES
!=====================================================================
!=====================================================================

!---------------------------------------------------------------------
! These resources determine the overall size of the ruleeditor.
! You should not change these very much.
!
! controls the width of the ruleeditor
ruleeditor*outer-form.width:  17000
! controls the height of the ruleeditor
ruleeditor*outer-form.height: 16000
! controls the height of the IF (predicate) part of the rule
ruleeditor*if-work-outer-container.height: 7000
! controls the height of the THEN (actions) part of the rule
ruleeditor*then-work-outer-container.height: 6000

!---------------------------------------------------------------------
! These resources control the look and size of the border surrounding
! the ruleeditor
!
! controls the border width around the outside of the rule editor
ruleeditor*outer-frame.shadowThickness: 100
! controls the type of shadoe around the outside of the ruleeditor
! alternatives are SHADOW_IN, SHADOW_OUT, SHADOW_ETCHED_IN and
! SHADOW_ETCHED_OUT.
ruleeditor*outer-frame.shadowType: SHADOW_OUT
! controls the border width around the rule editor (but inside the
! shadow) where a pixmap is placed by the rule browser.
ruleeditor*outer-form.borderWidth: 200
```

```
!-----------------------------------------------------------------------
! Resources which control the menus of the rule editor
!
! controls the type of shadow used for separators in the various menus
! in the ruleeditor
ruleeditor*menupack-separator.separatorType: SHADOW_ETCHED_IN
! controls the thickness of those separators
! alternatives are SHADOW_IN, SHADOW_OUT, SHADOW_ETCHED_IN and
! SHADOW_ETCHED_OUT.
ruleeditor*menupack-separator.shadowThickness: 100

!-----------------------------------------------------------------------
! These resources control the highlighting and shadow of those widgets
! in the ruleeditor which highlight or have shadows.
!
ruleeditor*highlightThickness: 75
ruleeditor*shadowThickness:    75

!-----------------------------------------------------------------------
! These resources control how the separator between the top title bar
! and the IF part of the rule appears
!
! controls how the separator appears on the screen
! alternatives are SHADOW_IN, SHADOW_OUT, SHADOW_ETCHED_IN and
! SHADOW_ETCHED_OUT.
ruleeditor*top-seperator.separatorType: SHADOW_ETCHED_IN
! controls how thick the separator is
ruleeditor*top-seperator.shadowThickness: 100

!-----------------------------------------------------------------------
! Resources controlling the TOP TITLE BAR
!
! controls the height of the TOP TITLE on the rule editor.  If you
! choose to use a bigger font, this value may have to be increased.
ruleeditor*top-rc.height: 1200

!-----------------------------------------------------------------------
! Resources controlling the BOTTOM TITLE BAR
!
! controls the width of the buttons on the BOTTOM TITLE
! BAR like 'Save' or 'Quit'.
ruleeditor*bottom-form*width: 2500
! controls the shadow thickness of buttons on the BOTTOM TITLE BAR.
ruleeditor*bottom-form*shadowThickness: 200
! controls the border width around the bottom title bar
ruleeditor*bottom-form.borderWidth: 50
```

```
!-------------------------------------------------------------------
! Thes resources control the other placement values of the
! simple/complex pair of buttons.  They're prettu boring.
!
ruleeditor*if-sc-radio-box.marginHeight: 50
ruleeditor*if-sc-radio-box.marginWidth: 0
ruleeditor*if-scrolled-work.topOffset: 100

!-------------------------------------------------------------------
! These resources control the large Help menu at the bottom right of
! the rule editor
!
! controls the highlight thickness when the menu is selected
ruleeditor*bottom-form*command-help-frame*shadowThickness: 75
! controls the inner border width of the menu
ruleeditor*bottom-form*command-help-frame*borderWidth: 0
! controls the shadow thickness of the menu.  This is set large so it
! appears that it is another button like 'Save' or 'Quit'
ruleeditor*bottom-form*command-help-frame.shadowThickness: 200
! controls the type of shadow for the Help menu.
! alternatives are SHADOW_IN, SHADOW_OUT, SHADOW_ETCHED_IN and
! SHADOW_ETCHED_OUT.
ruleeditor*bottom-form*command-help-frame.shadowType: SHADOW_OUT

!-------------------------------------------------------------------
!-------------------------------------------------------------------
!       RESOURCES AFFECTING THE PANED WINDOW OF THE RULEEDITOR
!-------------------------------------------------------------------
!-------------------------------------------------------------------
! These resources control each of the scrolled windows in the
! ruleeditor.  There is one for the IF part and one for the THEN part.
!
ruleeditor*XmScrolledWindow.shadowThickness: 0
ruleeditor*XmScrolledWindow.borderWidth: 0
! controls where scroll bars are placed on the screen when they are
! needed.  THIS RESOURCE DOES NOT SEEM TO FUNCTION CORRECTLY.
! Alternatives are TOP_LEFT, BOTTOM_LEFT, TOP_RIGHT, BOTTOM_RIGHT.
ruleeditor*XmScrolledWindow.scrollBarPlacement: BOTTOM_RIGHT
! these control the overall spacing of things in the rule editor.
! Tinker with them to see how things change.
ruleeditor*XmScrolledWindow*spacing: 100
ruleeditor*XmScrolledWindow.scrolledWindowMarginWidth: 50
ruleeditor*XmScrolledWindow.scrolledWindowMarginHeight: 50
```

```
!----------------------------------------------------------------------
! These resources control the sash of the paned window.  The sash is
! the horizontal line with a box on it separating the predicate and
! actions.
!
! This resource controls the width and height of the sash.
ruleeditor*work-paned.sashWidth:  500
ruleeditor*work-paned.sashHeight: 500
! controls the shadow thickness of the sash
ruleeditor*work-paned.sashShadowThickness: 100

!----------------------------------------------------------------------
!----------------------------------------------------------------------
!       RESOURCES AFFECTING THE IF (PREDICATE) PART OF THE RULE
!----------------------------------------------------------------------
!----------------------------------------------------------------------
! This resource determines the border width of the IF part of the rule
! outside the scroll bars
ruleeditor*if-work-outer-container.borderWidth: 0

!----------------------------------------------------------------------
! This resource determines the border width of the IF part inside the
! scroll bars
ruleeditor*if-work.borderWidth: 50

!----------------------------------------------------------------------
! These resources control the spacing of items inside the IF part.
!
ruleeditor*if-work.horizontalSpacing: 200
ruleeditor*if-work.verticalSpacing: 200

!----------------------------------------------------------------------
! This resource controls the alignment of the IF label.
! Alternatives are ALIGNMENT_BEGINNING, ALIGNMENT_CENTER, and
! ALIGNMENT_END.
ruleeditor*if-label.alignment: ALIGNMENT_BEGINNIN

!----------------------------------------------------------------------
! THESE RESOURCES CONTROL THE FIELDS IN THE IF PART.
!
! controls the blink rate for any text input area in a field.
! Expressed in thousands of a second
ruleeditor*field-container*blinkRate: 400
! these two control the border width of the fields and the various
! windows in them.  To make the fields more prominent increase the
! following number.
ruleeditor*field-container*borderWidth: 50
ruleeditor*field-container.borderWidth: 0
! increasing these values makes for a very bold looking field
ruleeditor*field-container.field-left-side.borderWidth: 0
ruleeditor*field-container.field-right-side.borderWidth: 0
! control the separation between fields.  Increase these values to
! increase the vertical separation of the fields.
ruleeditor*field-container.topOffset: 200
ruleeditor*field-container.bottomOffset: 200
```

```
!----------------------------------------------------------------------
!----------------------------------------------------------------------
! THESE RESOURCES CONTROL THE LOGICAL GROUPINGS (BOXES) IN THE IF PART
!----------------------------------------------------------------------
!----------------------------------------------------------------------
! the shadow thickness and border width of a box
ruleeditor*assoc-frame.shadowThickness: 0
ruleeditor*assoc-frame.borderWidth: 50

! the way a box appears if shadow thickness (above) is greater than 0.
! Alternatives are SHADOW_IN, SHADOW_ETCHED_IN, and SHADOW_ETCHED_OUT.
ruleeditor*assoc-frame.shadowType: SHADOW_OUT
! controls the spacing between fields inside logical groupings.  These
! should be correlated with the if-work.horizontalSpacing and
! if-work.verticalSpacing above.
ruleeditor*assoc-container.horizontalSpacing: 200
! these control the spacing of the logical groupings.  They should be
! consistant with ruleeditor*field-container.bottomOffset:.  In the
! future only one resource should be specified for the fields and the
! logical groupings and the rest should copy it.
ruleeditor*assoc-container.topOffset: 200
ruleeditor*assoc-container.bottomOffset: 200

! controls the pixmap used for the bars appearing at the top of each
! logical grouping.  Alternatives are 50_foreground, 25_foreground,
! background, horizontal, vertical, slant_right, and slant_left.
ruleeditor*assoc-bar.backgroundPixmap: 75_foreground
! controls the height of the bars and their placement
ruleeditor*assoc-bar.height: 350
ruleeditor*assoc-bar.topOffset: 400
ruleeditor*assoc-bar.leftOffset: 400
ruleeditor*assoc-bar.rightOffset: 400
! controls the alignment of the logical groupings labels (i.e. "OR")
! Alternatives are ALIGNMENT_BEGINNING, ALIGNMENT_CENTER, and
!   ALIGNMENT_END.
ruleeditor*assoc-label.alignment: ALIGNMENT_BEGINNING

!----------------------------------------------------------------------
! Since motif does not make screen design easy these resources have
! been correlated with each other to offer a pleasing screen design.
! Play with these at the risk of making the rule editor more ugly.  If
! you do tinker with them, you should alter them all by the same value
! (i.e. +100 or -1000).
!
! controls the position of the message type menu and the rule name
ruleeditor*message-type-menu.leftOffset: 4725
! controls he position of the Simple/Complex pair of buttons
ruleeditor*if-sc-radio-box.leftOffset: 4725
! controls the position of the grab box on the sash
ruleeditor*work-paned.sashIndent: 4900
! controls the initial size of the Key of each field.
ruleeditor*field-key.width: 4510
```

```
!-------------------------------------------------------------------
! These resources control the menu in the IF part of the rule.  It
! seems like a lot of resources, but you can get interesting effects
! by changing them.
!
! these 5 control the appearance of the menu.
ruleeditor*if-work-buttons.shadowThickness: 75 !for button borders
ruleeditor*if-work-buttons*borderWidth: 0
ruleeditor*if-work-buttons.marginHeight: 50
ruleeditor*if-work-buttons.marginHeight: 50
ruleeditor*if-work-buttons.spacing: 50
! these 2 control its positioning and
ruleeditor*if-work-buttons.rightOffset: 100
ruleeditor*if-work-buttons.topOffset: 100

!-------------------------------------------------------------------
!       RESOURCES AFFECTING THE THEN (ACTIONS) PART OF THE RULE
!-------------------------------------------------------------------
! These resourced control the appearance of the THEN part.
!
! controls the border width of the THEN part
ruleeditor*then-work-outer-container.borderWidth: 0
! controls the border width of the THEN part inside the scrollbars
ruleeditor*then-work.borderWidth: 0
! controls the spacing of actions within the THEN part
ruleeditor*then-work.horizontalSpacing: 200
ruleeditor*then-work.verticalSpacing: 200

!-------------------------------------------------------------------
! This resource controls the alignment of the THEN label.
! Alternatives are ALIGNMENT_BEGINNING, ALIGNMENT_CENTER, and
!   ALIGNMENT_END.
ruleeditor*then-label.alignment: ALIGNMENT_BEGINNING

!-------------------------------------------------------------------
! These resources control the menu in the THEN part of the rule.  It
! seems like a lot of resources, but you can get interesting effects
! by changing them.
!
! these 5 control the appearance of the menu.
ruleeditor*then-work-buttons*shadowThickness: 75
ruleeditor*then-work-buttons.shadowThickness: 75
ruleeditor*then-work-buttons*borderWidth: 0
ruleeditor*then-work-buttons.marginHeight: 50
ruleeditor*then-work-buttons.marginHeight: 50
ruleeditor*then-work-buttons.spacing: 50
! these 2 control its positioning and
ruleeditor*then-work-buttons.topOffset: 100
ruleeditor*then-work-buttons.rightOffset: 100
```

IV. Sample Ruleset

```
$format_version 1
$desc <no description>
$created 617153873
$updated 617155560

$created 617155393
$updated 617155393
$name r1
$if
  "1-week-remind:" "is_before" "1 week ago" "Date" %0
 %and 1
$then
 "reminder" %"copy to" 1
 "zwrite" %"shell with message as stdin" 1
$end

$created 617155393
$updated 617155393
$name d1
$if
  "1-week-delete:" "is_before" "1 week ago" "Date" %0
 %and 1
$then
 %"delete" 0
$end

$created 617343086
$updated 617343086
$name argus
$if
   "To:" "contains" "argus" "Case Insensitive With Commas As ORs" %0
   "cc:" "contains" "argus" "Case Insensitive With Commas As ORs" %0
  %or 2
 %and 1
$then
 "siftargus" %"move to" 1
$end

$created 608015888
$updated 608015888
$name From me
$if
  "From:" "contains" "mackay" "Case Insensitive With Commas As ORs" %0
 %and 1
$then
 "siftme" %"move to" 1
$end
```

```
$created 616781895
$updated 616781895
$name Mailer damon
$if
  "From:" "contains" "mailer-daemon" "Case Insensitive Text" %0
 %and 1
$then
 "siftdemon" %"move to" 1
$end

$created 617656115
$updated 617656115
$name <no name>
$if
   "To:" "contains" "argus" "Case Insensitive With Commas As ORs" %0
   "cc:" "contains" "argus" "Case Insensitive With Commas As ORs" %0
  %or 2
 %and 1
$then
 "siftargus" %"move to" 1
$end

$created 618959256
$updated 618959256
$name <no name>
$if
   "To:" "contains" "staff" "Case Insensitive With Commas As ORs" %0
   "cc:" "contains" "staff" "Case Insensitive With Commas As ORs" %0
  %or 2
 %and 1
$then
 "siftstaff" %"move to" 1
$end
```

V. Message Type Registry

```
#MT: 8
NAME: bug-report
PARENT NAME: MSG
FIELDS: {
        To: <Case Insensitive With Commas As ORs>
        From: <Case Insensitive With Commas As ORs>
        Subject: <Case Insensitive With Commas As ORs>
        Date: <Date>
        Software: <Case Insensitive With Commas As ORs>
        Bug: <Case Insensitive With Commas As ORs>
        Severity: <Case Insensitive With Commas As ORs>
}

NAME: meeting
PARENT NAME: MSG
FIELDS: {
        To: <Case Insensitive With Commas As ORs>
        From: <Case Insensitive With Commas As ORs>
        cc: <Case Insensitive With Commas As ORs>
        Subject: <Case Insensitive With Commas As ORs>
        place: <Case Insensitive With Commas As ORs>
        time: <Date>
}

NAME: feature-request
PARENT NAME: MSG
FIELDS: {
        To: <Case Insensitive With Commas As ORs>
        From: <Case Insensitive With Commas As ORs>
        Subject: <Case Insensitive With Commas As ORs>
        Date: <Date>
        Argus-application: <Case Insensitive With Commas As ORs>
        Feature-requested: <Case Insensitive With Commas As ORs>
        Severity-of-need-1..10: <Integer>
}

NAME: feature-announcement
PARENT NAME:
FIELDS: {
        To: <Case Insensitive With Commas As ORs>
        Cc: <Case Insensitive With Commas As ORs>
        Argus-application: <Case Insensitive With Commas As ORs>
        New-feature: <Case Insensitive With Commas As ORs>
}
```

```
NAME: phone
PARENT NAME: MSG
FIELDS: {
        To: <Case Insensitive With Commas As ORs>
        From: <Case Insensitive With Commas As ORs>
        cc: <Case Insensitive With Commas As ORs>
        Subject: <Case Insensitive With Commas As ORs>
        Caller: <Case Insensitive With Commas As ORs>
        when: <Date>
        about: <Case Insensitive With Commas As ORs>
        return-call: <Case Insensitive With Commas As ORs>
}

NAME: MSG
PARENT NAME:
FIELDS: {
        To: <Case Insensitive With Commas As ORs>
        From: <Case Insensitive With Commas As ORs>
        Subject: <Case Insensitive With Commas As ORs>
        Date: <Date>
}

NAME: rule
PARENT NAME:
FIELDS: {
        To: <Case Insensitive With Commas As ORs>
        Subject: <Case Insensitive With Commas As ORs>
}

NAME: bug-fix
PARENT NAME: MSG
FIELDS: {
        To: <Case Insensitive With Commas As ORs>
        From: <Case Insensitive With Commas As ORs>
        Subject: <Case Insensitive With Commas As ORs>
        Date: <Date>
        Software: <Case Insensitive With Commas As ORs>
        Old-bug: <Case Insensitive With Commas As ORs>
        The-fix: <Case Insensitive With Commas As ORs>
}
```

VI. Data Collection Files

Rule Activity Log

```
History between Fri Jul 14 03:38:48 1989 and Sat Jul 15 03:38:48 1989
Rule Wed Apr  5 19:03:48 1989
        In RuleSet sifter
                Fired 0 out of 253 times
                on Message Type unknown
                Fired 0 out of 1 times
                on Message Type MSG
                Fired 0 out of 2 times
                on Message Type feature-announcement
Rule Wed Apr  5 19:02:27 1989
        In RuleSet sifter
                Fired 0 out of 253 times
                on Message Type unknown
                Fired 0 out of 1 times
                on Message Type MSG
                Fired 0 out of 2 times
                on Message Type feature-announcement
Rule Wed Apr  5 19:07:16 1989
        In RuleSet sifter
                Fired 2 out of 253 times
                on Message Type unknown
                Fired 0 out of 1 times
                on Message Type MSG
                Fired 0 out of 2 times
                on Message Type feature-announcement
Rule Wed Apr  5 19:04:52 1989
        In RuleSet sifter
                Fired 9 out of 253 times
                on Message Type unknown
                Fired 1 out of 1 times
                on Message Type MSG
                Fired 2 out of 2 times
                on Message Type feature-announcement
```

Proposed format change:

```
Rulename: Wed Apr 5 19:04:52 1989
RuleSet:  sifter

Fired: 9
Outof: 253
Message type:  unknown

Fired: 1
Outof: 1
Message Type: MSG

Fired: 2
Outof: 2
Message Type: feature-announcement
```

Message Traffic Log

```
History between Fri Jul 14 03:38:48 1989 and Sat Jul 15 03:38:48 1989
Number of messages of type feature-announcement
        shuffled or unspecified (unknown): 1
        received (incoming): 0
        sent (outgoing): 0
Number of messages of type MSG
        shuffled or unspecified (unknown): 1
        received (incoming): 0
        sent (outgoing): 0
Number of messages of type unknown
        shuffled or unspecified (unknown): 253
        received (incoming): 0
        sent (outgoing): 0
Number of messages of type feature-announcement
        shuffled or unspecified (unknown): 1
        received (incoming): 0
        sent (outgoing): 0

History between Sat Jul 15 03:38:48 1989 and Sun Jul 16 03:38:48 1989
Number of messages of type unknown
        shuffled or unspecified (unknown): 196
        received (incoming): 0
        sent (outgoing): 0
```

Proposed format change:

```
Start History: Sat Jul 15 03:38:48 1989
End History:   Sun Jul 16 03:38:48 1989
Message type:  unknown
Unspecified: 196
Incoming: 0
Outgoing: 0
```

Rule Life Log

```
RuleSet modified: "newmail": (was Tue Aug 30 12:04:06 1988) Tue
Aug 30 12:51:35 1989
        Rule deleted (oldphonemessage) Tue Aug 30 12:04:05 1989

RuleSet created: "sendmail": Tue Aug 30 12:56:58 1989

Rule Created: () ID: Tue Aug 30 13:07:13 1989
If: (and [To word= ] [cc word= ] [From word= ] [Subject word= ]
[Caller word= ] [when word= ] [about word= ] [return-call word= ] )
Then: (system zwrite mackay You have a phone call)

RuleSet modified: "sendmail": (was Tue Aug 30 13:04:40 1989)
Tue Aug 30 13:07:14 1989
        Rule added () Tue Aug 30 13:07:13 1989

Rule Created: () ID: Tue Aug 30 13:13:41 1989
If: (and [To word=  ] [cc word= ] [From word= ] [Subject word= phone]
[Caller word= ] [when word= ] [about word= ] [return-call word= ] )
Then: (system zwrite mackay You have a phone call)
```

Proposed format change:

```
Rule name:  Tue Aug 30 13:13:41 1989
Activity:   Created:
If: (and [To word=  ] [cc word= ] [From word= ] [Subject word= phone]
    [Caller word= ] [when word= ] [about word= ] [return-call word= ])
Then: (system zwrite mackay You have a phone call)
```

VII. Argus data collection file: argus.data

Explanation of the argus.data file

The top part of the file contains information received from argusi or argusdc. (Argusi is the Motif version and argusdc is the line-command version of the program that lets users control which data is collected about their use of Argus.)

```
Format_version 6
**RULE-LIFE:        Data on creation, modification, deletion of rules
1                       Enable switch:  1 = on  0 = off
0                       Currently within the time period? 1=yes, 0=no
620120328               Start time for data collection
620123928               Stop time for data collection
3600                    Data collection interval (derived from above)
**RULE-ACTV:        Data on when rules fire on what messages
1                       Enable switch:  1 = on  0 = off
1                       Currently within the time period? 1=yes, 0=no
620984328               Start time for data collection
621070728               Stop time for data collection
86400                   Data collection interval (derived from above)
**MSG:              Data on types of messages processed & rules fired
1                       Enable switch:  1 = on  0 = off
0                       Currently within the time period? 1=yes, 0=no
620984328               Start time for data collection
621070728               Stop time for data collection
86400                   Data collection interval (derived from above)
```

The bottom contains temporary information being stored for subsequent compression by message traffic and rule activity data files. (Rule life does not have temporary data.)

Rule activity temporary data:

```
0: 10                   0 indicates Rule activity data.
                            10 rules follow.
617342960 #1            Rulename not specified so used creation date.
                            1 ruleset follows.
sifter #1               Ruleset name is sifter
                            1 rule follows
unknown 109 0 0 0 0 0   Message type is "unknown" (should be "MSG")
                          3 pairs indicating total msgs/total firings
                          pair 1: unspecified.  109 messages. 0 fired.
                          pair 2: incoming.     0 messages.   0 fired.
                          pair 3: outgoing.     0 messages.   0 fired.
616782261 #1            Next rule to be analyzed, 1 ruleset follows.
sifter #1               Ruleset name is sifter, 1 rule follows
unknown 109 0 0 0 0 0   etc.
617343154 #1
```

```
Message traffic temporary data:

1: 2                    1 indicates message traffic data.
                            2 messages follow.
unknown 49 0 0 0 0 0    Message type is "unknown" (should be "MSG")
                            3 pairs. 1st is message.  2nd always 0.
                                pair 1: unspecified.  49 messages.
                                pair 2: incoming.      0 messages.
                                pair 3: outgoing.      0 messages.
unknown 60 0 0 0 0 0    Next message to be analyzed.
```

VIII. Argus Command Line Specification

Sample format for the command line usage message:

```
Usage:     rulebrowser [-help] [-new] ruleset

arguments:
    ruleset   name of the ruleset

switches:
    -h
    -help     Lists this documentation
    -n
    -new      Specifies that a new ruleset is to be created

examples:
    rulebrowser myrules
    rulebrowser -n mynewrules

for help:   rulebrowser -help
```

Standard names for command line arguments

Structure	Description
filename	Name of file
folder	Name of a message folder
msgsrc	Source of a message (*mh*, *rmail*)
msgtype	Type of message (*bug-fix*, *phone*)
ruleset	Named group of rules
server	Name of a rule server
rulenum	Position of a rule in a ruleset

Switches that do not take arguments

Switch		Description
-e	-elim	Eliminate (delete)
-f	-force	Force action, don't ask
-h	-help	Display usage message
-n	-new	Create new item (e.g. rule)

Switches with fixed arguments

Switch		Valid Args	Description
-a	-after	[rulenum]	Insert after specified rule number
-b	-before	[rulenum]	Insert before specified rule number
-d	-data	[all | none]	Turn on all data collection?
		[msg | nomsg]	Turn on message traffic data?
		[rl | norl]	Turn on rule life data?
		[ra | nora]	Turn on rule activity data?
-r	-rule	[rulenum]	Which rule number?
-s	-state	[on | off]	Save rule-processing state information?
-u	-uprop	[on | off]	Save user-defined properties?
-w	-warn	[on | off]	Verbose warning messages?

Switches with names as arguments

Switch	Description
-FNfilename	Filename for input/output
-FOfolder	Folder name
-MTmsgtype	Existing message type
-NMmsgtype	New message type
-LFfilename	Loading file
-RSruleset	Ruleset
-MSmsgsrc	Message Source
-SVserver	Rule server

Table of Contents