Autosys commands

0.1d

24 August 2010

Document Release Note

Document Details

Name	Version No.	Description
Autosys	0.1d	*The documents briefs the the Autosys system states and commands, and it also lists the JIL sub-commands and job attributes.*

Revision Details

Action Taken (Addition/Deletion/ Modification)	Previous Page No.	New Page No.	Revision Description

Created by : Stephen Saldanha	Authorised by:
Date: 24 August 2010	Date:

About this Document

Purpose

This document has been written to help you define jobs using Autosys, and monitoring and managing these jobs.

Intended Audience

The following are the intended audience for this document:

- *Oracle DBA*
- *System Administrators*
- *Operations personnel*

References

Autosys Reference Guide

Contents

The total number of pages in this document, including the title page, is 38.

1 Overview

CA AutoSys is a full job scheduling and management system for NT systems. AutoSys lets you create simple or complex sets of instructions to automatically execute at regular intervals. AutoSys lets you trigger jobs by date and time, file arrival, and other criteria. If you decide to use AutoSys in a UNIX environment, it has a feature that lets you automatically convert cron job files for use on AutoSys. Like a mainframe scheduling product, AutoSys automatically monitors your jobs. If necessary, AutoSys can automatically restart jobs that have failed, were cancelled, or were aborted for a variety of reasons. For mission critical enterprise environments, AutoSys also has a high availability option that will perform an unattended rollover to a backup server if your primary server fails.
CA AutoSys extends its management capabilities to Windows, Linux, UNIX, AIX, HPUX, and z/OS environments.

What is a Job?

- A job is a single action that can be performed on a valid Autosys client
- A job is defined by assigning it a name and specifying the attributes that describe its associated behavior. These attributes form the Autosys job definition

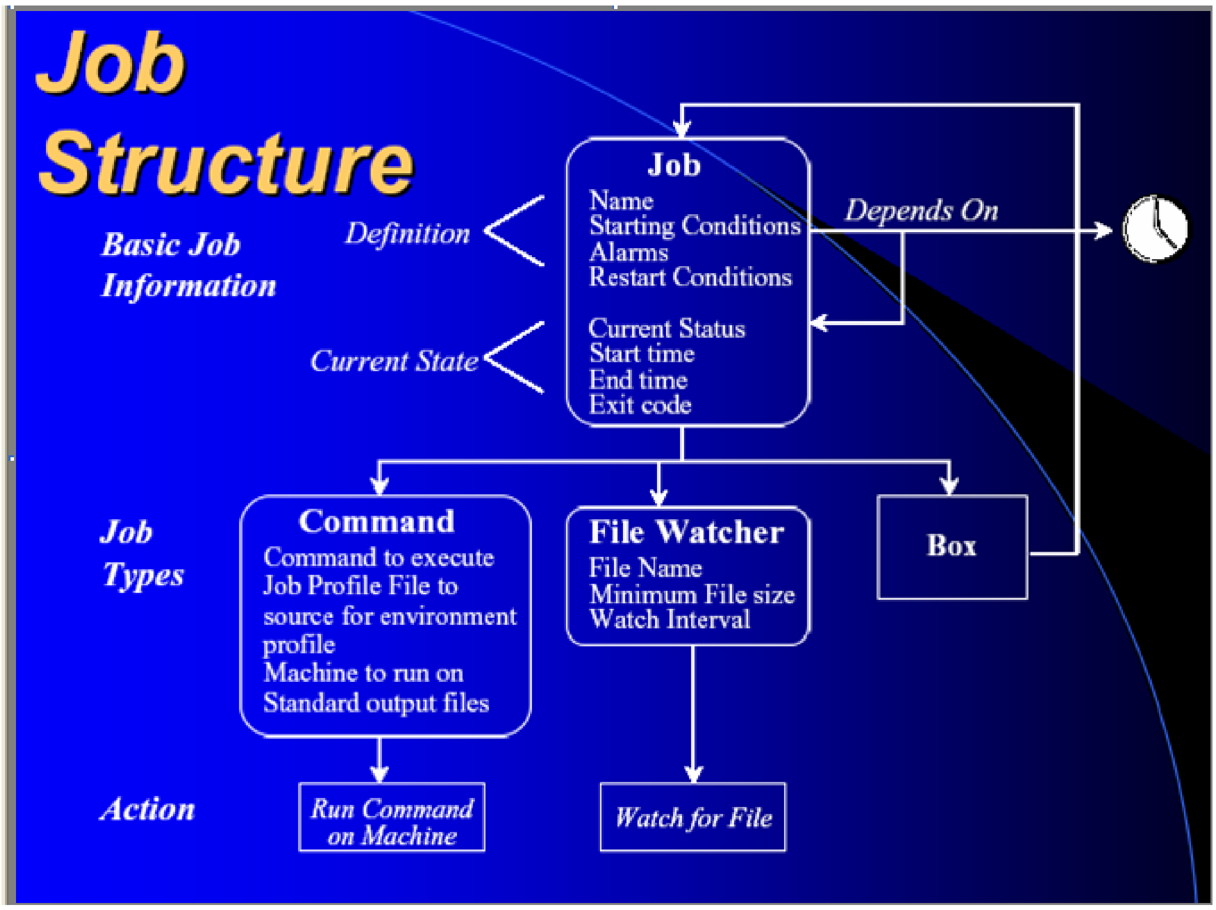
What are the types of Autosys jobs?

1. **Command jobs :** Command jobs are basic jobs .It runs a specified command when the start conditions are met

2. **File Watcher Job :** These jobs are run based upon the following conditions
   a. A file's existence.
   b. A file being unchanged in size for a defined time period
   c. A file reaches a specified size

3. **Box jobs:** These jobs can be used to group jobs in a controllable branch stream. They are basically a container of jobs with like starting conditions eg Date and/or time or job dependencies. These jobs do not itself perform any actions but can trigger other actions.

The diagram below explains a job structure



2 Autosys Commands

Command Description

You can execute AutoSys commands at the system prompt, using options and arguments to specify exactly what you want them to do. You can also embed many of these commands within shell scripts. The Autosys commands are explained in detail below

archive_events

archive_events removes data from various AutoSys database tables that are older than the specified number of days. You use this command to prevent the AutoSys database from becoming full. archive_events will optionally copy the information to an archive directory before deletion.

```
archive_events {-n num_of_days | -j num_of_days |
-l num_of_days | -s num_of_days } [-A] [-d directory_name]
[-B batch_size] [-D dataserver:database | -D TNSname]
[-t timeout_in_secs]
```

Options

`-n num_of_days`
Indicates that records older than the num_of_days should be deleted from the event table in the database.
`-j num_of_days`
Indicates that the information older than the num_of_days should be deleted from the job_runs table in the database.
`-l num_of_days`
Indicates that the autotrack information older than the num_of_days should be deleted from the audit_info and audit_msg tables in the database.
`-s num_of_days`
Indicates that the job resource usage information older than the num_of_days should be deleted from the svarchive_tbl table in the database.
`-A`
Indicates that information is to be copied to an archive file before being deleted; otherwise, the information is discarded.
`-d directory_name`
Indicates a user-specified directory in which the archived data should be stored. If this option is omitted, data is archived to the default directory named $AUTOUSER/archive.
`-B batch_size`
Specifies the batch size—the number of events to be archived at a time.
`-D data_server:database`
Indicates the name of the Sybase dataserver, and the specific database within it, from which events are to be archived.
`-D TNSname`
Indicates the TNS alias name of the Oracle dataserver from which events are to be archived.
`-t timeout_in_secs`
Specifies the number of seconds to wait before timing out your SQL connection.

Examples

1 To copy all events in the events table older than 5 days to the default archive file, and delete it from the database, enter this:

```
archive_events -A -n 5
```

2 To copy all job_runs statistics older than 5 days to a specified archive directory, and delete them from the database, enter this:

```
archive_events -A -d /my_archive -j 5
```

autocal

Autocal starts the Graphical Calendar Facility.The `autocal` command is used to start up the AutoSys Graphical Calendar Facility to define and maintain AutoSys calendars. Calendars are lists of dates that you can use to schedule the days on which jobs should, or should not, run

Example

To start the Graphical Calendar Facility, enter this:

```
autocal &
```

autocal_asc

Autocal_asc adds, deletes, and prints custom calendar definitions. `Autocal_asc` provides a text-based, command line mechanism for creating, deleting, and printing custom calendars, which may be used to specify the days on which to start jobs, or days on which a job should not be started (e.g., holidays). Each calendar has a unique name and a list of days. Once created, calendars can be referenced in a job definition.

Example

To start `autocal_asc` to begin entering calendar information, follow these steps:

1 Enter the following command:

```
      autocal_asc
```

The following messages will appear:

```
      Utility to Add/Delete or Print entries in Calendar
      Calendar Name:
```

2 At this point you can enter the name of an existing calendar you want to edit, or the name of a new calendar. After entering the name, the following message appears:

```
      Add (A) or Delete (D) or Print (P)?
```

3 If you want to add a date to the calendar, enter this:

```
      A
```

The following prompt appears:

```
      Date (MM/DD/[YY]YY [HH:MM]):
```

4 Using the following format, enter the date and, optionally, the time:

```
      MM/DD/[YY]YY [HH:MM]
```

where: `MM` is the month, `DD` is the day, `[YY]YY` is the year, `HH` is the hours, in 24-hour format, and `MM` is the minutes.

This prompt is repeated as long as dates are entered in response to the prompt.

5 To complete the additions, press <Enter> without specifying a date. This action will also exit the `autocal_asc` utility.

autocons

The `autocons` command starts up the AutoSys Operator Console for monitoring AutoSys jobs in real-time.

Example

To start the Operator Console, enter this:

```
    autocons &
```

autoflags

The `autoflags` command prints out the AutoSys version and release number, the database being used, and the operating system.

```
autoflags [-a | -i | -o | -d | -v | -r | -h | -n]
```

Options

`-a` : Displays all `autoflags` information to standard output.
`-I` : Displays the AutoSys tape ID number to standard output.
`-o` : Displays the operating system to standard output.
`-d` : Displays the database type to standard output, either SYB for Sybase or ORA for Oracle.
`-v` : Displays the AutoSys version number to standard output.
`-r` : Displays the AutoSys release number to standard output.
`-h` : Displays the hostid to standard output to standard output.
`-n` : Displays the hostname to standard output to standard output.

Example

To view all AutoSys and system configuration information, enter this:

```
autoflags -a
```

autoping

`autoping` verifies that the server and client machines are properly configured and are communicating successfully. It also checks and verifies that the Remote Agent and the Remote Agent's database connection are functioning correctly.

```
autoping -m {machine|ALL} [-A] [-D]
```

Options

`-m machine|ALL` : The name of the machine to be verified. This must be a real machine, and must be listed in the `/etc/hosts` file on the machine from which the command is issued. `ALL` checks all machines.
`-A` : Send an alarm if problems are detected.
`-D` : Check the database connections on the specified machine(s).

Example

To check whether the machine "venice" is properly configured for AutoSys, and that its Remote Agent can function properly, enter this:

```
      autoping -m venice
```

If successful, the following will display:

```
      AutoPinging Machine [venice]
      AutoPing WAS SUCCESSFUL!
```

To check all machines and verify their database access, enter this:

```
autoping -m ALL -D
```

If successful, the following will display:

```
AutoPinging Machine [venice] AND checking the Remote Agent’s DB
Access. AutoPing WAS SUCCESSFUL!
AutoPinging Machine [rome] AND checking the Remote Agent’s DB
Access. AutoPing WAS SUCCESSFUL!
```

autosc

It starts the AutoSys Graphical User Interface (or GUI) and displays the GUI Control Panel.

Example

To start the AutoSys Graphical User Interface, you enter:

```
autosc &
```

autostatus

`autostatus` writes the current status of the specified job or the current value of a global variable to standard output. This facility is especially useful in two circumstances:

- When an application needs to know the status of another job.
- When complex starting conditions are required that are beyond the scope of the starting conditions that can be easily specified in the job definition.

```
autostatus {-J job_name | -G global_name} [-S autoserv_instance]
```

Options

`-J job_name`

Specifies the name of the job whose status needs to be determined.The current status is returned to standard output.

`-G global_name`

Specifies the name of a global variable that has been set using the `sendevent` command or the Send Event dialog. The value of the global variable is returned to standard output.

`-S autoserv_instance`

Specifies the three-character code of the AutoSys instance to be queried. The default is the value of `$AUTOSERV` from the current environment.

Examples

1 To check the current status of the job named “test_install” in the current instance of AutoSys, enter this:

```
autostatus -J test_install
```

A one-word response to this command displays on standard output, such as the following: `SUCCESS`

autosyslog

`autosyslog` is used to view either the Event Processor log file or the Remote Agent log file for the specified job.

```
autosyslog [-e | -J job_name] [-p]
```

Options

`-e`

Indicates that the Event Processor log is to be monitored.

`-J` *`job_name`*

Indicates that the Remote Agent log for the specified *`job_name`* is to be viewed.

`-p`

Specifies to append messages to the output file if anything in the profile file failed, if commands were not executed, or environment variables or definitions were not set.

Examples

1 To view the Event Processor log, enter this on the command line of the system where the Event Processor is running, or where it ran last:

```
autosyslog –e
```

2 To view the Remote Agent log of the last run of the “test_install” job, you would issue the following command on the command line of the machine where the “test_install” job ran:

```
autosyslog -J test_install
```

3 To view the output file with profile information, enter this:

```
autosyslog -j job_name -p
```

This command will display the log file first, appending the profile output, if there is any. If no profile output file exists, the profile output section will be empty, for example:

```
---------------------------------------------------
OutPut from File: auto_rem_pro.491.216.1
---------------------------------------------------
---------------------------------------------------
```

autosys_secure

It maintains the AutoSys Edit and Exec superuser ownerships, remote authentication methods and AutoSys database password. Also maintains NT user IDs and passwords, which are required for AutoSys jobs to run on NT client machines.

```
autosys_secure
```

Or

```
autosys_secure [-q] {-a | -c | -d} -u user@host_or_domain
[-o old_password] -p password
```

Options

`-h`

Displays help. Use this option to get help on the `autosys_secure` command-line options.

`-q`

Specifies to run in quiet mode and not print any messages to the screen.

`-a`

Specifies to add a user ID and password. You must also supply the `–u` and `-p` options.

`-c`

Specifies to change an existing user password. You must also supply the `-u`, `-o`, and `-p` options.

`-d`

Specifies to delete an existing user password. You must also supply the `-u` and `-o` options.

`-u` *`user@host_or_domain`*

Specifies the NT user whose password you are entering. NT user names can be from 1 to 20 characters in length and can contain all characters except the following:* [ ] + : ; " < > . , ? / \ |

`-o` *`old_password`*

Specifies the password for an existing user. If you are changing a password or deleting a user ID and password, you must supply this option. If the password is NULL, enter **`NULL`**.

`-p` *`password`*

Specifies the password for the *user@host_or_domain* that you want entered in the AutoSys database.

Example

To start `autosys_secure` in interactive mode, enter this:

```
autosys_secure
```

The `autosys_secure` options display.

autotimezone

`autotimezone` lets you query the timezones table, and add and delete timezones table entries. The timezones table contains entries that you can specify in a job definition using the `timezone` attribute

```
autotimezone [-a entry_name value] [-c entry_name value]
[-t timezone_name] [-d entry_name] [-q entry_name | sql_pattern]
[-l]
```

Options

`-a` *`entry_name value`*

Adds an Alias entry to the timezones table. An Alias entry associates a name with a time zone.

`-c` *`entry_name value`*

Adds a City entry to the timezones table.

`-t` *`timezone_name`*

Adds a time zone entry to the timezones table.

`-d` *`entry_name`*

Deletes an entry from the timezones table.

`-q` *`entry_name | sql_pattern`*

Queries the timezones table for the setting of a specific alias, city, orzone.

`-l`

Lists all entries in the timezones table

Examples

1 The following command adds a city named “San-Jose” to the timezones table:

```
autotimezone -c San-Jose US/Pacific
```

2 The following command deletes the city named “San-Jose” from the timezones table:

```
autotimezone -d San-Jose
```

3 The following command queries the timezones table for all entries beginning with the letter “d”:

```
autotimezone -q d%
```

The output from this command would be similar to the following:

```
Entry Type Zone
--------------------------------------
Dallas City US/Central
Denver City US/Mountain
Detroit City US/Central
```

autotrack

`autotrack` tracks changes to the AutoSys database (e.g., job definition changes, sendevent calls, and job overrides) and writes this information to the database.

```
autotrack [-D data_server:database | -D TNSname] [-u 0|1|2] [-l]
[-h|H] [-v] [-F "from_time"] [-T "to_time"] [-U user_name]
[-m machine] [-J job_name] [-t A|B|C|J|M|O|S|T]
```

Options

`-D data_server:database`
Indicates the name of the Sybase dataserver, and the specific database within it, to be searched for the specified information.
`-D TNSname`
Indicates the TNS alias name of the Oracle dataserver to be searched for the specified information.
`-u tracking_level`
Updates the level of detail that `autotrack` writes to the database, using Level 0, 1, or 2.
`-l`
Displays the currently set tracking level (0, 1, or 2).
`-h|H`
Displays the `autotrack` usage summary.
`-v`
Verbose reporting.
`-F "from_time"`
Reports changes or events that occurred from this date and time forward; the format is “MM/DD/[YY]YY HH:MM”.
`-T "to_time"`
Reports changes or events that occurred up to this date and time; the format is “MM/DD/[YY]YY HH:MM”.
`-U user_name`
Reports changes or events initiated by the specified user.
`-m machine_name`
Reports changes or events initiated from the specified machine.
`-J job_name`
Reports on the specified job. The “%” character may be used in the job name as a wildcard.
`-t autotrack_type`

Examples

The amount of detail written to the database (and, thus, available to query against) is determined by the `autotrack` tracking level. Level 2 tracking provides much more detail than does level 1, as shown in examples 1 and 2.
1 The following query requests verbose reporting about a job named “NightlyReport.”

```
autotrack -J NightlyReport -v
```

If the `autotrack` tracking level had been set to 1, the output of this request would resemble that shown below.

```
jane@taurus
11/21 10:04:54
job definition change
::::::::::::::::::::::::::::::::::::::::::::::::
jane@taurus
11/21 10:05:49
job definition change
command: date
::::::::::::::::::::::::::::::::::::::::::::::::
jane@taurus
11/21 10:06:29
```

```
sendevent issued
```
If the tracking level had been set to 2, `autotrack` would have written much more detail to the database. Thus, the same query
```
autotrack -J NightlyReport -v
```
would produce a report that includes the entire job definition with changes indicated by an asterisk.

2 To view all the changes that occurred to the job “NightlyReport” after 1 a.m. on November 12, 1997, enter this:
```
autotrack -F "11/12/1997 01:00" -J NightlyReport
```

3 To view all changes made by user “sue” over the weekend of November 16 and 17, 1997, enter this:
```
autotrack -U sue -F "11/16/1997 01:00" -T "11/17/1997 23:59"
```

autorep

`autorep` lists a variety of information about jobs, machines, and global variables currently defined in the AutoSys database. You can use it to list a summary of all currently defined jobs, or to display current machine load information. `autorep` serves as a problem tracking tool by listing all relevant event information for the last run of any given job, or a specified job run. You can also use it to extract job definitions in JIL script format and save them to an output file for later re-loading into AutoSys, as a means of backing up job definitions.

```
autorep {-J job_name | -M machine_name | -G global_name}
[-s | -d | -q | -o over_num] [-r run_num][-L print_level] [-t]
[-D data_server:database | -D TNSname]
```

Options

`-J` *`job_name`*

Indicates that a Job Report is desired. *`job_name`* specifies the name of the job on which to report.

`-M` *`machine_name`*

Indicates that a Machine Report is desired, which lists the machine’s Max Load, Current Load, and Factor. *`machine_name`* specifies the machine on which to report.

`-G` *`global_name`*

Indicates that a global variable report is desired, listing the variable name, value, and last modification date. *`global_name`* specifies the name of a global variable that has been set using the `sendevent` command or the Send Event dialog. In the specification, you can use `ALL` or wildcard characters.

`-s`

Indicates that a Summary Report is desired. This is the default.

`-d`

Indicates a Detail Report is desired.For a Job Report, *all* events from the last run of the requested job will be listed.

`-q`

Indicates a Query Report is desired, providing the current job or machine definition, in JIL format, as it exists in the AutoSys database.

`-o` *`over_num`*

Indicates an Override Report is desired, providing the overrides for the specified override number (`over_num`) and `job_name`

`-r` *`run_num`*

Indicates a report is desired for a specific job run (`run_num`).

`-t`

Requests that the time zone, if one is specified in the job definition, appear in the report.

`-L` *`print_level`*

(Job reports only.) Indicates the number of levels of nesting for boxes for which the specified information should be listed.

`-D` *`data_server:database`*
Indicates the name of the Sybase dataserver, and the specific database within it, to be searched for the specified information.
`-D` *`TNSname`*
Indicates the TNS alias name of the Oracle dataserver to be searched for the specified information.

Example

1 The following summary report is for a run of the Nightly_Download example,
This is the command that requests the report:

```
autorep -J Nightly_Download
Job Name Last Start Last End ST RunPri/Xit

________________ _____________________________________ _________
Nightly_Download 11/10/1997 17:0011/10/1997 17:52SU 101/1
Watch_4_file 11/10/1997 17:0011/10/1997 17:13SU 101/1
filter_data 11/10/1997 17:13 11/10/1997 17:24SU 101/1
update_DBMS 11/10/1997 17:24 11/10/1997 17:52SU 101/1
```

chase

`chase` determines from the AutoSys database which jobs are in the STARTING or RUNNING state, and on which machine

```
chase [-A] [-E]
```

Options

`-A`
Indicates that if `chase` detects any inconsistencies (i.e., jobs that should be running, but are not) it sends alarms to the AutoSys RDBMS(s).
`-E`
Indicates that if a job and the job’s Remote Agent are not running on the client machine, but the database indicates they should be, `chase` puts the job in FAILURE status, triggering the job to be restarted if the job definition includes the `n_retrys` attribute.

Example

If a job is running longer than expected and you suspect it may have abnormally ended (but still shows as “running”), you should run `chase`. To verify that the job is running, receive an alarm if there is an inconsistency, and restart the job if necessary, enter this:

```
chase -A -E
```

chk_auto_up

It inspects the environment variables and configuration files, then determines if the AutoSys database (Event Server) and Event Processor are running.

```
chk_auto_up [-Q]
```

Options

`-Q`
Indicates that the command should output just the exit code without any descriptive message.

Example

To check that the database and Event Processor are up and to view the results on your monitor, enter this: **`chk_auto_up`**

chk_cond (SP)

AutoSys Stored Procedure

The `chk_cond (SP)` prints a report containing diagnostics about a job having starting conditions that are based on another job that does not exist.

```
chk_cond job_name
```

Options

`job_name`
Specifies the name of the job against which diagnostics should be run.

Example

A job named "jobA" has the following conditions specified: **`condition: success(jobB) and success(jobC).`** But, "jobC" does not exist.
To print out diagnostics for all jobs in a Sybase dataserver, enter this:

```
1> chk_cond
2> go
```

The following would be displayed to standard output:

```
Job Missing_Condition_Job
--------- --------------------------------
jobA jobC
```

clean_files

The `clean_files` command deletes old Remote Agent log files from the various machines.

```
clean_files -d days
```

Options

`-d` *`days`*
Specifies that log files older than the number of *`days`* will be removed.

Example

To start `clean_files` and delete all Remote Agent log files older than 1 day, enter this:

```
clean_files -d 1
```

cron2jil

The `cron2jil` command converts each line in a UNIX crontab file to a corresponding JIL script (`*.jil` file) and, if necessary, a run calendar file(`*.cal` file).

```
cron2jil -f crontab_file [-d output_directory] [-i include_file]
[-m machine] [-p prefix]
```

Options

`-f` *`crontab_file`*
Specifies the name of the crontab formatted file.
`-d` *`output_directory`*
Specifies the directory to which the `*.jil` and `*.cal` files should be written.
`-i` *`include_file`*

Specifies the name of a file containing JIL statements that are to be included in *every* generated `*.jil` file.
`-m` *`machine`*
Specifies the name of the machine on which the translation should occur.
`-p` *`prefix`*
Specifies a prefix that should be inserted before each job's name.

Example

To translate a crontab file with the name "daily", enter this:

```
cron2jil -f daily
```

dbstatistics

`dbstatistics` performs the following tasks:

- It update statistics in the database for optimal performance by invoking the Sybase Transact-SQL command `update statistics`. For Sybase databases, it updates the statistics for the event, job, job_status, and job_cond tables. For Oracle, it computes statistics for all of the AutoSys tables.
- `dbstatistics` runs the AutoSys `dbspace` command to check the available space in the database. `dbspace` prints a summary of the free space versus the used space in the database. If the amount of free space is insufficient, `dbspace` issues warning messages and generates a DB_PROBLEM alarm.

eventor

Use the `eventor` command to bring up the Event Processor (and, optionally, the Shadow Event Processor), also referred to as the "event demon." `eventor` runs in the background, by default.

```
eventor [-f] [-n] [-q][-G] [-M shadow_machine] [-Z $ZTEAMDIR]
```

Options

`-f`
Specifies that the Event Processor should run in the foreground, and all of its output should be sent to the display from which the command was issued.
`-n`
Specifies that `eventor` *is not* to run the `chase` command on start-up.
`-q`
Specifies that `eventor` should run in quiet mode, meaning that after the Event Processor has been started, `eventor` should *not* execute the `tail -f` command on the `event_demon` log file.
`-G`
Starts up the Event Processor in Global AutoHold mode.
`-M` *`shadow_machine`*
Specifies that a Shadow Event Processor should be started on the machine named *`shadow_machine`*.
`-Z` *`$ZTEAMDIR`*
Sets the ZTEAMDIR environment variable, if it is not already set

Examples

1 To start the Event Processor under normal circumstances, enter this:

```
eventor
```

2 To start the Event Processor on the local machine, and a Shadow Event Processor on the machine named "jupiter", enter this:

```
eventor -M Jupiter
```

gatekeeper

`gatekeeper` is an interactive utility you can use to maintain AutoSys license keys located in the AutoSys database.

Example

To start the license utility, enter this:

```
gatekeeper
```

job_depends

`job_depends` provides detailed reports about the dependencies and conditions of a job. This command can be used to determine the current state of a job, its job dependencies, and (for boxes) nested hierarchies as specified in the job definition, and a report of what jobs will run during a given period of time.

```
job_depends [-c | -d | -t] [-J job_name] [-F from_date/time]
[-T to_date/time] [-L print_level]
[-D data_server:database | -D TNSname]
```

Options

`-c`
Prints out the current state of a job and the names of any jobs that are dependent on this job.
`-d`
Prints out the starting conditions for a job; no indication of the current status of the job is provided.
`-t`
Time Dependencies. Prints out the starting conditions for a job.
`-J job_name`
Indicates the job on which to report, where *`job_name`* is the name of the target job.
`-F "from_date/time"`
Indicates the report start date and time, where *`from_date/time`* is the date and time of the first job in the report.
`-T "to_date/time"`
Indicates the report end date and time, where *`to_date/time`* is the date and time of the last job in the report.
`-L print_level`
Indicates the print level for the report, where *`print_level`* is any valid numeric value specifying the number of levels of nesting to display for a box job.
`-D data_server:database`
Indicates the name of the Sybase dataserver, and the specific database within it, to be searched
`-D TNSname`
Indicates the TNS alias name of the Oracle dataserver to be searched for the specified information.

Example

1 To display a report on the current condition status of a job named “jobX”, you would issue the following command:

```
job_depends -c -J jobX
```

You would see a report similar to the following displayed to standard output:

```
Start Dependent
Job Name Status Date Cond? Cond? Jobs?
-------- ------ ---------- ------ ---------
```

```
jobX INACTIVE No No Yes
Dependent Job Name
-------------------
jobY
```

This report shows that “jobX” has no date or starting conditions, but another job, “jobY” is dependent on it.

2 To display a report on the current condition status of a job named “jobA”, which does have starting conditions and dependencies, you would issue the following command:

```
job_depends -c -J jobA
```

3 To display a report on the box job named “job_bxA” showing all the nested levels of jobs and boxes within this job, you would enter the following command:

```
job_depends -d -J job_bxA
```

4 To display a report on jobs that are scheduled to run on New Years day, you would enter the following command:

```
job_depends -t -J ALL -F "01/01/1998 00:00" -T "01/02/1998 00:00"
```

monbro

`monbro` runs a monitor or report (browser) that has already been defined, either using either `jil` or the GUI.

```
monbro -N name [-P poll_frequency]
[-D data_server:database| -D TNSname] [-q]
```

Options

`-N name`
Specifies the name of the monitor or report (browser) to be run.
`-P poll_frequency`
Applies to monitors only, and indicates the time interval (in seconds) to sleep between polls of the database.
`-D data_server:database`
Specifies the name of the Sybase dataserver, and the specific database within it, from which to retrieve events and the monitor or report definition.
`-D TNSname`
Specifies the TNS alias name of the Oracle database from which to retrieve events and the monitor or report definition.
`-q`
Specifies that you want to display monbro definitions in JIL format.

Example

To run a monitor called “mon1” which is defined in the default database,
enter:

```
monbro -N mon1
```

Sample output with the `-q` option:

```
monbro -N mon1 -q
insert_monbro: xxx
mode: m
all_events: Y
job_filter: a
sound: N
alarm_verif: N
insert_monbro: xxx2
```

```
mode: b
all_events: N
alarm: Y
all_status: N
running: N
success: Y
failure: Y
terminated: N
starting: N
restart: N
job_filter: b
job_name: box
currun: N
after_time: "11/11/1997 12:12"
```

record_sounds

This utility records sounds for playback in monitors. It stores the sounds in files located in the `$AUTOUSER/sounds` directory.

`record_sounds` ***`AutoSys_password`***

Example

To record sounds, be sure the workstation you are on is equipped for sound, has a microphone plugged in, and is set up correctly, then, enter this: **`record_sounds`**

sendevent

Sends events to AutoSys for a variety of purposes, including starting or stopping AutoSys jobs, stopping the Event Processor, and putting a job on hold. This command is also used to set AutoSys global variables or cancel a scheduled event.

```
sendevent -E event [-S autoserv_instance] [-A alarm] [-J job_name]
[-s status] [-C comment] [-P priority] [-M max_send_trys]
[-q job_queue_priority] [-T "time_of_event"]
[-G "global_name=value"] [-k signal_number(s)] [-u]
```

Options

`-E` *`event`*

Specifies the event to be sent. This option is required. Any one of the following events may be specified:

STARTJOB

Start the job specified in `-J` *`job_name`* if the starting conditions are satisfied.

KILLJOB

Kill the job specified in `-J` *`job_name`*.

DELETEJOB

Delete the job specified in `-J` *`job_name`* from the database.

FORCE_STARTJOB

Start the job specified in `-J` *`job_name`*, regardless of whether the starting conditions are satisfied.

JOB_ON_ICE

Puts the job specified in `-J` *`job_name`* “on ice.”

JOB_OFF_ICE

Takes the job specified in `-J` *`job_name`* “Off Ice”. Jobs that are taken “Off Ice” will not start until the next time their starting conditions are met.

JOB_ON_HOLD
Puts the job specified in `-J` *`job_name`* “On Hold”. When a job is “OnHold”, it will not be started, and downstream dependent jobs will not run.
JOB_OFF_HOLD
Takes the job specified in `-J` *`job_name`* “Off Hold.” If the starting conditions are met, the job will be started.
CHANGE_STATUS
Forces a change in the status of the job specified in `-J` *`job_name`*.
STOP_DEMON
Stops the Event Processor (event demon). This is the only way to stop the Event Processor.
CHANGE_PRIORITY
Changes the Job Queue Priority of the job specified in `-J` *`job_name`* to the priority specified by the `-q` *`priority`* arguments.
COMMENT
Attaches a message to the event, for informational purposes only.
ALARM
Sends an alarm. Generally alarms are generated internally; however, using this event, users and programmers can send alarms to alert operators.
SET_GLOBAL
Sets an AutoSys global variable. This event is sent with a high priority so the Event Processor will process the variable before it is referenced by any jobs at runtime.
SEND_SIGNAL
Sends a signal to a running AutoSys job.

`-S` *`autoserv_instance`*
Specifies the three-character AutoSys instance (e.g., ACE) to which the event should be sent.
`-A` *`alarm`*
Specifies the name of the alarm to be sent. This option is only used when the specified event is ALARM; it is required when using this event.
`-J` *`job_name`*
Specifies the name of the job to which the specified event should be sent
`-s` *`status`*
Specifies the status to which the job specified in `-J` *`job_name`* should be changed.
`-C` *`comment`*
Specifies a textual comment that is to be attached to this event for, documentation purposes only.
`-P` *`priority`*
Specifies the priority to be assigned to the event being sent.
`-q` *`job_queue_priority`*
Specifies the new queue priority to be assigned to the job.
`-T "`*`time_of_event`*`"`
Specifies the date and time when the event should be processed.
`-G "`*`global_name=value`*`"`
Specifies the name and value of a global variable when a `SET_GLOBAL` event is sent.
`-k` *`signal_number(s)`* `or` *`signal_name`*
For processes running on UNIX, this argument specifies the signal number.
`-u`
Cancels the event specified in the `-E event` option.

Examples

1 To start a job named “test_install” that has no starting conditions (and therefore must be started manually), enter this:

```
sendevent -J test_install -E STARTJOB
```

2 To force a job to start named “wait_job”, which is waiting on the completion of another job, and explain the reasons for your action, enter this:

```
sendevent -J wait_job -E FORCE_STARTJOB -C "tired of waiting,forced it"
```

3 To change the status of a job called “ready_to_run” to ON_HOLD to prevent its execution, and to assign the `sendevent` command a high priority so it will be sent immediately, enter this:

```
sendevent -J ready_to_run -E JOB_ON_HOLD -P 1
```

When you want the above job to run, enter this:

```
sendevent -J ready_to_run -E JOB_OFF_HOLD
```

4 To prevent a job called “lock_out” from running between the hours of
11:00 a.m. and 2:00 p.m., a pair of `sendevent` commands could be used to place it on hold during that time. (These same `sendevent` commands could be placed in a job that is run daily to perpetuate this condition on a regular basis.)
To put the job on hold at 11:00 a.m., enter this:

```
sendevent -J lock_out -E JOB_ON_HOLD -T "11/08/1997 11:00"
```

To take the job off hold at 2:00 p.m., enter this:

```
sendevent -J lock_out -E JOB_OFF_HOLD -T "11/08/1997 14:00"
```

5 To write a comment into the Event Processor log file, enter this:

```
sendevent -E COMMENT -C "have not received EOD files - an hour late again"
```

6 To stop the Event Processor at 2:30 a.m. on November 9, 1997 (it is
always a good idea to attach a comment to this event), enter this:

```
sendevent -E STOP_DEMON -T "11/09/1997 02:30" -C "stopped for upgrade"
```

7 To change a job called “resource_hog” to a lower priority (it is currently at 1 and is not yet running), and to only issue the `sendevent` command 5 times, rather than letting it try indefinitely, enter this:

```
sendevent -J resource_hog -E CHANGE_PRIORITY -q 10 -M 5
```

8 To kill a job named “wrong_job” which is running on another AutoSys instance called “PRD”, enter this:

```
sendevent -J wrong_job -E KILLJOB -S PRD
```

9 To set a global variable named “today” having a value of “12/25/ 1997”, enter this:

```
sendevent -E SET_GLOBAL -G "today=12/25/1997"
```

10 To delete the global variable named “today”, enter this:

```
sendevent -E SET_GLOBAL -G "today=DELETE"
```

11 To send the Unix signal number 1 to a job named “RunData”, enter this:

```
sendevent -E SEND_SIGNAL -J RunData -k 1
```

12 To cancel all unprocessed JOB_OFF_HOLD events for a job named “RunData”, enter this:

```
sendevent -E JOB_OFF_HOLD -J RunData -u
```

xql

`xql` is the AutoSys-supplied utility that accesses the Sybase dataserver from any properly configured client.

```
xql -U user_name -P password [-S server] [-D database]
[-c "command_string" | -f input_file] [-d delimiter] [-l]
```

`[-T timeout_interval]`

Options

`-U user_name`

Specifies the name of the Sybase user to log in as.

`-P password`

Specifies the Sybase password for the specified *`user_name`*.

`-S server`

Specifies the name of the Sybase dataserver to be accessed.

`-D database`

Specifies the specific Sybase database to be accessed.

`-c "command_string"`

Specifies an SQL statement to be passed to Sybase and executed in “batch”, rather than interactive mode.

`-f input_file`

Specifies a text file containing SQL statements to be passed to Sybase, to be executed in batch

`-d delimiter`

Specifies the delimiter to be used for output, which is written to standard output.

`-l`

Specifies that a long listing is desired, meaning that the output should be displayed as one column name (i.e., field name) with its corresponding value per line.

`-T timeout_interval`

Specifies a period of time after which `xql` will terminate the session if no activity has occurred.

Example

The following examples assume that the Sybase account and password are “autosys” and “autosys” respectively. The examples also assume that the dataserver defaults to `AUTOSYSDB`, and the database defaults to “autosys”.

1 To select the job ID and job name (the field names are assigned by AutoSys) from the job table in the default dataserver and database, enter this (using the “autosys” user and the “autosys”, or the appropriate, password):

```
xql -Uautosys -Pautosys
```

Then, at the `xql` prompt, enter this:

```
xql>>[AUTOSYSDB][autosys] 1> select joid,
xql>>[AUTOSYSDB][autosys] 2> job_name
xql>>[AUTOSYSDB][autosys] 3> from job;
```

Assuming that there are only three jobs, this will be the output:

```
joid job_name
-------- -----------------------------
101 tester
106 test1
107 domail.tibet
```

To exit the interactive session, enter this:

```
xql>>[AUTOSYSDB][autosys] 1> exit
```

3 JIL

Jil runs the Job Information Language (JIL) processor to add, update, and delete AutoSys jobs, machines, monitors, and reports. Also used to insert one-time job override definitions.The `jil` executable is the language processor for the AutoSys Job Information Language (JIL). Using JIL (the language itself), you can define and update jobs, monitors, reports, and machines. The `jil` command can be used in one of two ways:

- To automatically submit job definitions to the AutoSys database. You do this by redirecting a JIL script file to the `jil` command.
- To interactively submit job definitions to the AutoSys database. You do this by issuing the `jil` command only and entering JIL statements at the provided `jil>>` prompts. To exit interactive mode, enter "exit" at the prompt, or press <Control+d>.

```
jil [-q] [-S autoserv_instance] [-V none | job | batch]
```

Options

`-q`

Specifies that `jil` should be run in "quiet" mode and that it should only output error messages.

`-S autoserv_instance`

Specifies the three-character AutoSys instance name, e.g. ACE, (and therefore the RDBMS) to which to apply the definition(s).

`-V none | job | batch`

Specifies whether or not the JIL processor should verify that jobs specified in the job dependency condition for the job actually exist in the AutoSys database.

Examples

1 To redirect a text file named "job1" containing JIL statements into `jil`, enter this:

```
jil < job1
```

2 To redirect a text file named "job1" containing JIL statements into `jil` and prohibit the JIL processor from verifying the existence of specified jobs in its job dependencies, enter this:

```
jil < job1 -V none
```

JIL Sub-commands

JIL sub-commands are used to establish if you are creating, updating, or deleting a job. When using the AutoSys GUI, the same instructions are conveyed by entering values in various fields, and/or by pressing different buttons in the GUI's dialog boxes.

Job Attributes

AutoSys job attributes are used to specify everything from the name of a new job to the specific exit conditions which must be "successful" in order for the job to be considered completed. Job attributes can be defined using JIL statements, which are input to the `jil` command, or they can be defined using the AutoSys Graphical User Interface (GUI). Regardless of method, the attributes are virtually the same.

alarm_if_fail

JIL Attribute

Indicates whether an alarm should be posted to the Event Processor if the job fails or is terminated.

`alarm_if_fail: toggle`

`toggle` can be `y` or `1` for yes; or `n` or `0` for no.

Example

To set the job currently being created or updated to post an alarm if it fails
or is terminated, enter this:

```
alarm_if_fail: y
```

auto_delete

JIL Attribute

Indicates whether the job should be automatically deleted after completion. If `auto_delete` is set to `0`, AutoSys will immediately delete job definitions *only* if the job completes successfully. If the job does *not* complete successfully, AutoSys will keep the job definition for seven days before automatically deleting it.

`auto_delete: value`

`where value` can be any number of hours; `0` indicates immediate deletion, while `-1` indicates that the job should not be deleted.

Example

To set the job to be automatically deleted 5 hours after completion, enter this:

```
auto_delete: 5
```

auto_hold

Job Attribute

This feature is *only* for jobs that are in a box. When a job is in a box, it inherits the starting conditions of the box. This means that when a box goes into the RUNNING state, the box job will start all the jobs within it (unless other conditions are not satisfied).
By specifying "yes" to AutoHold On, AutoSys automatically changes the job state to ON_HOLD when the box it is in begins RUNNING. To start the job, take the job off hold by sending the JOB_OFF_HOLD event. This is done with the AutoSys `sendevent` command.

`auto_hold: toggle`

`toggle` can be `y` or `1` for yes; or `n` or `0` for no.

Example

To set the job to be automatically placed on hold, enter this:

```
auto_hold: y
```

avg_runtime (JIL only)

Job Attribute

Indicates an average run time (in minutes) for a job that is newly submitted to the AutoSys database; it establishes this value in the absence of the job having been run multiple times.

`avg_runtime: value`

`where` *`value`* can be any number of minutes, to include decimal numbers.

Example

To set the average run time for a new job to be five minutes, enter this:

`avg_runtime: 5`

box_failure

Job Attribute

Specifies the conditions to be interpreted as a box failure. The Box Completion Conditions appears in the Job Definition dialog only when you select a box job, and when you are opening an existing box job definition.

`box_failure: conditions`

`where` *`conditions`* can specify any of the dependencies described in the

Examples

1 To set the status of the box currently being created or updated to FAILURE if “JobA” fails *or* “JobB” fails, but ignoring if “JobC” fails, enter this:

`box_failure: failure(JobA) OR failure(JobB)`

2 To set the status of the box currently being created or updated to FAILURE only if all three jobs fail, enter this:

`box_failure: failure(JobA) AND failure(JobB) AND failure(JobC)`

box_name

Job Attribute

Indicates the name of the box in which this job is to be placed.

`box_name: name`

where *`name`* can be any string of up to 30 alphanumeric characters, plus the underscore character (_).

Example

To specify that the job currently being created or updated should be put in the box named “Box1”, enter this:

`box_name: Box1`

box_success

Job Attribute

Specifies the conditions to be interpreted as a box success.

`box_success:` *`conditions`*

where *`conditions`* can specify any of the dependencies

Examples

1 To set the status of the box currently being created or updated to SUCCESS only when “JobA” succeeds *or* “JobB” succeeds, but ignoring the status of “JobC”, enter this: **`box_success: success(JobA) OR success(JobB)`**

2 To set the status of the box currently being created or updated to SUCCESS only if all three jobs succeed, and they are the only jobs in the box, enter nothing. This is the default behavior of box jobs.

3 To set the status of the box currently being created or updated to SUCCESS only if jobs “JobA” and “JobB” succeed, and “JobC” completes, regardless of its status, enter this:

`box_success: success(JobA) AND success(JobB) AND done(JobC)`

box_terminator

Job Attribute

This attribute specifies whether the box containing this job should be terminated if the job fails or terminates

`box_terminator:` *`toggle`*

where *`toggle`* can be `y` or `1` for yes; or `n` or `0` for no.

Example

To specify that if the job currently being created or updated fails, the box it is in should be terminated, enter this:

`box_terminator: y`

chk_files

Job Attribute

This resource check specifies the minimum amount of file space that must be available on designated file system(s) for the job to be started. One or more file systems, specified with full pathnames or directory names, and their corresponding sizes, can be specified. If multiple file systems are specified, separate them with a single space.

`chk_files:` *`file_system_name size`* `[`*`file_system_name size`*`]...`

`file_system_name` = The full pathname of the file system where the file space will be needed, and environment variables exported in the profile can be used in the pathname.

`Size` = Is the file space needed (in kilobytes). Many *`file_system_name size`* pairs can be specified, separated by aspace.

Example

To specify that the job currently being created or updated should have 100K of space available on the file system named “rootfs” and 120K of space available on the file system named “auxfs1”, enter this (using the full pathname):

```
chk_files: /rootfs 100 /auxfs1 120
```

command

Job Attribute

The `command` attribute can be the name of a command, shell script, or application program that is to be run on the client machine (when all necessary conditions are met).

```
command: command_name command_runtime_args
```

`command_name` = The *`command_name`* can be the name of any command, shell script, or application program executable.
`command_runtime_args` = Any runtime arguments.

Examples

1 To specify that the UNIX `date` command is to be executed, enter this:
```
command: /bin/date
```
2 If the `/bin` directory is included in the search path, either in the `/etc/auto.profile` or in the user-defined profile, the UNIX `date` command can be specified to execute by entering this:
```
command: date
```
3 To specify that the “Backup” script in the `/usr/common` directory is to be executed, enter this:
```
command: /usr/common/Backup
```
Or
If the `/usr/common` directory is included in the runtime environment path of the job being defined, enter this instead:
```
command: Backup
```
4 To specify that the “Backup” script in the `/usr/common` directory is to be passed today’s date (that has been set as the global variable named “RunDate”), you could enter this:
```
command: /usr/common/Backup -D $$RunDate
```
5 To remove all files from the `/tmp` subdirectory under the directory specified in the “MY_BACKUPS” global variable, you could enter this:
```
command: rm $${MY_BACKUPS}/tmp/*
```

condition

Job Attribute

Description

When using the condition attribute, any number of job dependencies can be specified. All dependencies must evaluate to “true” before the dependent job will be run.

```
condition: [(]condition[)][{AND | OR }[(] condition [)]]...
```

where *`conditions`* can specify any combination of the dependencies

Examples

1 This is the job dependency specification for a job which is to run *only* if the job named “DB_BACKUP” succeeds:
```
condition: success(DB_BACKUP)
```
2 If “JobC” should be started only when *both* “JobA” and “JobB” complete successfully *or* when both “JobD” and “JobE” complete,regardless of whether they failed, succeeded, or terminated, specify the following dependency in the job definition for “JobC”:
```
condition: (success(JobA) AND success(JobB)) OR (done(JobD) AND done(JobE))
```

date_conditions

This attribute specifies whether or not there are date and/or time conditions for starting this job. If it is set to "no", the remainder of the date/time related attributes will be ignored. If set to "yes", the date can be specified using the `days_of_week` attribute, or the specific dates can be specified by associating this job with a custom calendar, created using the Graphical Calendar facility or the `autocal_asc` command.

`date_conditions:` ***`toggle`***
where *`toggle`* can be a `y` or `1` for yes; or `n` or `0` for no.

Example

To specify that starting date and time conditions are to be in effect, enter this:
`date_conditions: y`

days_of_week

Job Attribute

Indicates the days of the week when the job will be run. One or more days can be selected, or all days can be selected.

`days_of_week: {`*`day`*` [,`*`day`*`]... | all}`
where *`day`* can be any of the following:
`mo` (Monday), `tu` (Tuesday),`we` (Wednesday),`th` (Thursday),`fr` (Friday),`sa` (Saturday), `su` (Sunday) or `all` can be specified for every day of the week.

Examples

1 To specify that the job should be run only on weekdays, enter this:
`days_of_week: mo, tu, we, th, fr`
2 To specify that the job should be run every day of the week, enter this:
`days_of_week: all`

delete_box

JIL Sub-command

The `delete_box` sub-command deletes the specified box and all the jobs in that box.

`delete_box:` ***`box_name`***
`Where` *`box_name`* must be a box currently defined in the AutoSys database.

Example

To delete a box named "Box1" and all jobs inside it, you would specify the following sub-command in the JIL script:
`delete_box: Box1`

delete_job

JIL Sub-command

The `delete_job` sub-command deletes the specified job from the AutoSys database. Even if the job is already scheduled to run, it will not be run.

```
delete_job: job_name
```

where *`job_name`* must be a job or box currently defined in the AutoSys database.

Example

To delete a job called "Job1", you would specify the following sub-command in the JIL script:

```
delete_job: Job1
```

description

Job Attribute

Specifies a description for the job; for documentation purposes only.

```
description: text
```

where *`text`* can be any string of alphanumeric characters, up to 255 characters. Spaces can be included.

Example

To specify that the job is an incremental daily backup of the database, enter this:

```
description: "incremental daily backup of the database"
```

exclude_calendar

Job Attribute

Indicates the name of the custom calendar to be used for determining the days of the week on which this job will *not* run.

```
exclude_calendar: calendar_name
```

where *`calendar_name`* must be the name of a custom calendar that has already been created.

Example

To specify that the job can be run on any day except those days specified in the "holiday" calendar, which you have previously defined, enter this:

```
exclude_calendar: holiday
```

heartbeat_interval

Job Attribute

Specifies the frequency (in minutes) at which this job's command is expected to issue a heartbeat. Heartbeats are AutoSys's way of monitoring a job's actual progress.

```
heartbeat_interval: mins
```

where *`mins`* specifies the number of minutes; any reasonable number is acceptable.

Example
To set the heartbeat to be expected every 2 minutes, modify your program to call the heartbeat routine every 2 minutes or less by entering the following:
```
heartbeat_interval: 2
```

insert_job
JIL Sub-command

The `insert_job` sub-command adds a new command, box, or file watcher job definition to the AutoSys database.

```
insert_job: job_name
```

`job_name` = The unique job identifier used throughout AutoSys. It can be from 1 to 30 alphanumeric characters, and is terminated with white space.

Example
1 The following example creates a command job, specifying only the essential job attributes. The job is called “time_stamp”, is to run on the real machine “tibet”, and simply executes the `time_stamp.sh` shell script. To create this definition, enter the following sub-command and job attributes in the JIL script:
```
insert_job: time_stamp
machine: tibet
command: time_stamp.sh
```
The `job_type` attribute is optional when defining a command job. To specify a command job, enter this:
```
job_type: c
```

job_load
Job Attribute

Specifies the relative amount of processing power the job will consume.

```
job_load: load_units
```
where *`load_units`* specifies the relative load of the job, and can be any arbitrary value within the user-defined range of possible values (which are also arbitrary).

Example
To set the job load for a job that typically uses 10% of the CPU, with arange of possible load values from 1-100, enter this:
```
job_load: 10
```

job_terminator
Job Attribute

This attribute specifies whether the job should be terminated if the box it is in fails or terminates.

`job_terminator:` ***`toggle`***
where *`toggle`* can be `y` or `1` for yes; or `n` or `0` for no.

Example
To specify that if the box containing the job currently being created or updated fails, the job should be terminated, enter this:
```
job_terminator: y
```

job_type
Job Attribute

Specifies whether the job is a command job, file watcher job, or box job.

`job_type: type`
where `type` can be any one of the following:
`c` (command)
`f` (file watcher)
`b` (box)

Example
To set the job currently being created or updated to be a box job, enter this:
```
job_type: b
```

machine
Job Attribute

Specifies the client machine where the job will be run, under the control
of the Remote Agent.

`machine: {machine_name [, machine_name]...| 'machine_chooser_script'}`

where `machine_name` can be any real machine, virtual machine, or set of real machines. The name can be up to 80 characters.

Examples
1 To specify that the job be executed on either of the machines named “tibet” or “socrates”, enter this:
```
machine: tibet, socrates
```
2 To run the `svload` program at runtime to determine which machine to use, enter this:
```
machine: 'svload -a alg [-v virt | -l list] -p profile'
```
3 To run the script `/usr/local/bin/my-machine-chooser` at job runtime to determine which machine to use, enter this:
```
machine: '/usr/local/bin/my-machine-chooser'
```

max_exit_success
Job Attribute

Specifies the maximum UNIX exit code with which the job can exit and still be considered a success by AutoSys.

`max_exit_success: exit_code`
where `exit_code` can be any integer representing a UNIX exit code.

Example

To set the job to be considered successful when exiting with any exit code of “2” or less, enter this:
```
max_exit_success: 2
```

max_run_alarm

Job Attribute

Specifies the maximum run time (in minutes) that a job should require to finish normally.

```
max_run_alarm: mins
```
where `mins` can be any integer; it represents the maximum number of minutes the job should ever require to finish normally.

Example

To set the job to be considered as running too long if it runs for more than an hour and a half, enter this:
```
max_run_alarm: 90
```

min_run_alarm

Job Attribute

Specifies the minimum run time (in minutes) that a job should require to finish normally.

```
min_run_alarm: mins
```
`where mins` can be any integer; it represents the minimum number of minutes the job should ever require to finish normally.

Example

To set the job to be considered as completing too quickly if it runs for less than an hour and a half, enter this:
```
min_run_alarm: 90
```

n_retrys

Job Attribute

Specifies how many times, if any, the job should be restarted after exiting with a FAILURE status

```
n_retrys: attempts
```
`where attempts` can be any integer between 1 and 20.

Example

To set the job to be automatically restarted up to 5 times after an application failure (not system or network related), enter this:
```
n_retrys: 5
```

override_job

JIL Sub-command

The `override_job` sub-command specifies that a *one-time* override be applied to a particular job, for the indicated attributes

```
override_job: {job_name | job_name delete}
attribute_keyword: {value | NULL}
```

`job_name` = Must be a job or box currently defined in the AutoSys database. There is no default.
`Delete` = Used to cancel a previously specified job override.
`NULL` = Used to delete or negate any currently existing *`value`* for the indicated *`attribute_keyword.`*

Examples

1 To specify a one-time job override for the job named “job1” to change the standard output file, enter the following sub-command and attribute in the JIL script:

```
override_job: job1
std_out_file: /usr/out/run.special
```

2 To specify a one-time job override for the job named “jobA” to delete its job dependency condition and change the standard output file, enter the following sub-command and attributes in the JIL script:

```
override_job: jobA
std_out_file: /usr/out/run.special
```

owner

Job Attribute

Specifies the owner of the job. The `owner` is the user who invoked `jil` or the GUI Control Panel to define the job. This user will own all jobs defined during the session, and will have edit permission on the jobs.

```
owner: {user@machine | user}
```

where *`user@machine`* can be any valid user with an account on the specified machine, which must be a real, not a virtual machine.

Example

For the Edit Superuser to change the owner such that “chris” on any machine in the network can edit the job, and the job’s command will run with the permissions of “chris”, enter this:

```
owner: chris
```

permission

Job Attribute

The AutoSys permission scheme is based on the same permissions used in native UNIX.

```
permission: permission [, permission]
```

When a job is first created, the user ID is retrieved from the environment and attached to the job. Then the current value of the owner’s `umask` is used to supply default permissions to the job. The umask “write” permission is used as the default “edit” permission of the job, and the `umask` “execute” permission is used as the default “execute” permission of the job.These are the possible values for the `permission` attribute:

`Gx` =	Group Execute
`Ge` =	Group Edit
`Mx` =	Execute by any authorized users, regardless of the machine they are on
`Me` =	Edit by any authorized users, regardless of the machine they are on
`Wx` =	World Execute
`We` =	World Edit

Example

To set the job to allow anyone to execute it, *but* to allow only members of your group to edit it, enter this:

```
permission: ge, wx
```

priority

Job Attribute

Specifies the queue priority of the job.

```
priority: priority_level
```

where `priority_level` can be any integer 0 or larger. `priority_level` 0 indicates that the job should always be run immediately, regardless of the current machine load.

Examples

1 To set the job to always run, regardless of the current load on the client machine, accept the default which is 0.

2 To set the job to run with the highest priority, while not overriding the machine load control mechanism, enter this:

```
priority: 1
```

3 To set the job to run in the background when the machine load is low, enter this:

```
priority: 100
```

profile

Job Attribute

Specifies the profile that is to be sourced by the Bourne shell before the specified command is executed.

```
profile: pathname
```

`pathname` = The full pathname of the profile file to be sourced in order to establish the job's runtime environment. Variable substitution cannot be used.

Example

To set the user's profile called `my_profile` in their home directory called `/usr/home`, enter this:

```
profile: /usr/home/my_profile
```

run_calendar

Job Attribute

Indicates the name of the custom calendar to be used when determining the days of the week on which a job will run.

```
run_calendar: calendar_name
```

where `calendar_name` must be the name of a custom calendar that has already been created.

Example

To specify that the job should be run on the last business day of the month, as specified in the previously created custom calendar named "last_business", enter this:

```
run_calendar: last_business
```

run_window

Job Attribute

Indicates the time span during which the job will be allowed to start

`run_window: "time-time"`
where *`time-time`* must be entered in quotes, using the format "*`hh:mm-hh:mm`*" where the *`hh`* specifies hours, in 24-hour format, and the *`mm`* specifies minutes.

Example

To specify that the job should be allowed to start only between 11:00 p.m. and 2:00 a.m., regardless of other conditions, enter this:
`run_window: "23:00-02:00"`

start_mins

Job Attribute

Indicates the number of minutes past the hour, every hour, on the specified days or dates, when the job will be started.

`start_mins: mins [, mins]...`
`where` *`mins`* must be a number 0–59, representing the number of minutes past each hour when the job will be run.

Example

To specify that the job be run at a quarter past and a quarter before each hour, enter this:
`start_mins: 15, 45`

start_times

Job Attribute

Indicates the times of day, in 24-hour format, on the specified days or dates, when the job will be started.

`start_times: "time [, time]..."`
where *`time`* must be specified using the format *"hh:mm"* where the *`hh`* specifies hours, in 24-hour format, and the *`mm`* specifies minutes.

Example

To specify that the job be run at 10:00 a.m. and 2:00 p.m. on every specified day or date, enter this:
`start_times: "10:00, 14:00"`

std_err_file

Job Attribute

Specifies the file to which the standard error file's output should be redirected

`std_err_file: pathname`
Enter the `std_err_file` keyword and the full *`pathname`* for the standard error file.

Examples

1 To set the file `/tmp/test.err` to receive standard error file output for the job, enter this:

```
std_err_file: /tmp/test.err
```

2 To append new information to the error file, enter:

```
std_err_file: >>/tmp/test.err
```

std_in_file

Job Attribute

Specifies the file to which the standard input file for the job should be redirected.

`std_in_file:` ***`pathname`***

Enter the `std_in_file` keyword and the full *`pathname`* of the standard input file.

Examples

1 To set the file named `/tmp/test.in` to be read as the standard input file, enter this:

```
std_in_file: /tmp/test.in
```

2 To set the file named `/tmp/today's_date.in` to be read as the standard input file, set a global variable named "Today" (using `sendevent` or the Send Event dialog) to be today's date, then enter this:

```
std_in_file: /tmp/$${Today}.in
```

std_out_file

Job Attribute

Specifies the file to which the standard output file should be redirected.

`std_out_file:` ***`pathname`***

Enter the `std_out_file` keyword and the full *`pathname`* of the standard out file.

Examples

1 To set the file named `/tmp/test.out` to receive standard output for the job, enter this:

```
std_out_file: /tmp/test.out
```

2 To append new information to the output file, enter:

```
std_err_file: >>/tmp/test.out
```

term_run_time

Job Attribute

Specifies the maximum run time (in minutes) that a job should require to finish normally.

`term_run_time:` ***`mins`***

where *`mins`* can be any integer; it represents the maximum number of minutes the job should ever require to finish normally.

Example

To set the job to be automatically terminated if it runs longer than 90 minutes, enter this:

```
term_run_time: 90
```

timezone

Job Attribute

Allows you to schedule a job based on a chosen time zone. When the `timezone` attribute is specified in a job definition, the time settings in that job are based on the *`zone`* time zone

```
timezone: zone
```

`Zone` = Either a time zone recognized by the operating system or a case-insensitive string of characters corresponding to an entry in the timezones table.

Example

To set the time zone for a job definition to Chicago time, enter this:

```
timezone: Chicago
```

To set the time zone for a job definition to Pacific time, enter this:

```
timezone: US/Pacific
```

If you specify a time zone that includes a colon, you must quote the time zone name if you are using JIL, like this:

```
timezone: "IST-5:30"
```

update_job

JIL Sub-command

The `update_job` sub-command updates an existing command, box, or file watcher job definition in the AutoSys database.

```
update_job: job_name
```

`job_name` = The unique job identifier used to define the original job to AutoSys.

Example

To change a pre-existing command job called “time_stamp” to run on the real machine “paris”, rather than on the originally specified machine, enter the following sub-command and job attribute in the JIL script:

```
update_job: time_stamp
```

watch_file

Specifies the file for which this file watcher job should watch. The name of the file to watch for must be a legal UNIX filename, and it must identify the full pathname of the file.

```
watch_file: pathname
```

`pathname` = The full pathname of the file for which to watch.

Examples

1 To set the file watcher to watch for a file named `/tmp/batch.input`, enter this:

```
watch_file: /tmp/batch.input
```

2 To set the file watcher to watch for a file whose name has been assigned to a global variable named “file_1”, enter this:

```
watch_file: $${file_1}
```

watch_file_min_size

Job Attribute

Specifies the watch file minimum size (in bytes) which determines when enough data has been written to the file to consider it complete.

`watch_file_min_size: bytes`

where `bytes` can be any integer; it represents the minimum number of bytes in the file before it is considered complete.

Example

To set the file to be considered complete when it reaches 10K bytes (assuming the file has reached "steady state" as well), enter this:

```
watch_file_min_size: 10000
```

watch_interval

Job Attribute

Specifies the interval (in seconds) at which the file watcher job will check for the existence and size of the watched-for file.

`watch_interval: seconds`

`where seconds` can be any integer; it represents the time interval between checks of the file existence and file size.

Example

To set the file to be checked for a steady state every two minutes, enter this:

```
watch_interval: 120
```