EnterpriseSCHEDULE for OpenVMS Installation and Quick Start Guide

System Requirements for AXP, VAX or Itanium OpenVMS Systems:
- VMS V6.1 or later.
- System account
- 14500 blocks during installation
- 12500 blocks after installation
- 1100 global pages

Welcome to the Schedule for OpenVMS Installation and Quick Start guide.. Before you begin installation, please review the minimum system requirements listed on the left. . This Quick Start Guide will guide you through the installation of the product and help familiarize you with the most commonly used operations of the software. If you have any questions regarding the product, you can contact ISE at (310) 643-7310.

1 SCHEDULE for OpenVMS Installation

1a Installing from the Web or FTP site

To download the software, either download the installation files from **http://support.i-s-e.com/Software_Downloads/OpenVMS** or FTP them directly to your OpenVMS installation area. Start by entering the following FTP command:

```
$ FTP ftp.i-s-e.com
```

Enter your user name and password.
Change directories to the SCHEDULE distribution directory:

```
FTP> cd latest_svms
```

Download the savesets using the following commands:

Alpha:
```
FTP> GET/FDL SCHED076_a_axp.exe
FTP> GET/FDL SCHED076_b_axp.exe
```

Itanium:
```
FTP> GET/FDL SCHED076_a_itn.exe
FTP> GET/FDL SCHED076_c_itn.exe
```

Perform a RUN on the self extracting zip files and the savesets will be extracted.

Run the SCHEDULE installation procedure:

```
$ @SYS$UPDATE:VMSINSTAL SCHED ddcu:[directoryname]
```

to install EnterpriseSCHEDULE.

1b Updating a Version 7.4 or earlier PAS serial number

EnterpriseSCHEDULE PAS serial numbers Version 7.4 and earlier must be updated when upgrading to Version 7.5. Read the FAQ at http://www.i-s-e.com/FAQ/Schedule/S357/ for a description of the update process.

1c Loading the SCHEDULE PAS serial number

The EnterpriseSCHEDULE installation procedure requests a PAS serial number. To add a PAS serial number at any time, enter the following command:

```
$ @schedule_library:schedule_start add_pas
```

Enter the PAS serial number (provided by ISE) and company name at the prompts

```
Enter Company Name: Johnson Enterprises (example)
```

```
Enter new PAS: L50085/*/*/15JAN2023/0201/CNVLSBBBJB (example)
```

1d Completing the Installation

Define the needed foreign commands by adding to the system wide login file the following command:

```
$ @SCHEDULE_LIBRARY:SCHEDULE_LOGIN
```

You are now ready to try out SCHEDULE

After the installation completes if you requested that SYSMAN not be updated be sure to add the following command to the system startup file

2 Getting Started

The Windows client is the quickest and easiest way to work with EnterpriseSCHEDULE for OpenVMS.The following exercise requires it to be installed. If you haven't already installed the client, you can download it from the ISE support or FTP site. See the EnterpriseSCHEDULE for Windows Quick Start Guide or contact ISE for more information.

Connecting to the server using the Windows client

To start the client and connect to the OpenVMS server:
1. Choose Start on the Windows Task bar
2. Select Programs, **EnterpriseSCHEDULE** and then **EnterpriseSCHEDULE remote**
3. When prompted for a server, enter the descriptive name, network address and group number (usually 0) of an active server with EnterpriseSCHEDULE installed and click OK.
4. Enter your usual UNIX/OpenVMS username and password for the server at the prompt.

Loading the Demos

The EnterpriseSCHEDULE Demos can be loaded using the Assistant. To load the Demos:

1. Choose **File>Assistant** from the EnterpriseSCHEDULE main menu bar.
2. Select the Example A from the **Name** drop down.
3. If your home directory is not displayed, change it by clicking the **Change** button.
4. Click on the **Load** button to load the demo and display the layout.
5. Repeat for subsequent demo sets if desired.

Toolbar buttons

The EnterpriseSCHEDULE desktop is where all job scheduling, modification and monitoring takes place. The main components of the desktop along with the buttons that load them to the desktop are:

Explorer view - perform file maintenance tasks on jobs and other objects just as in the Windows Explorer,control job activity and selectively monitor jobs, directories and servers.

Layout display - lay out simple or elaborate job streams, control and monitor job activity and perfomance.

Job Monitor - monitor activity by job or event and bring up log data, current state and performance data
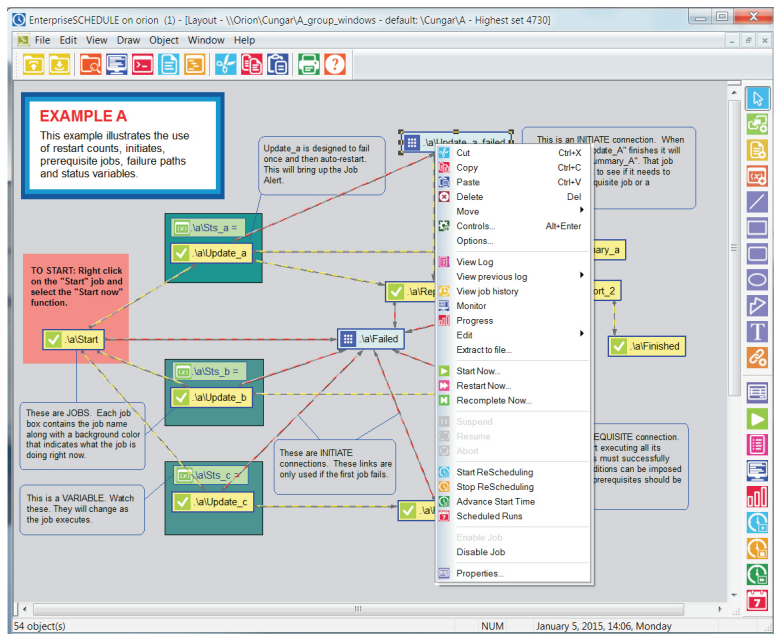
Command Line - control job activity, perform file maintenance tasks on jobs and other objects

3 WORKING WITH JOBS IN THE DEMO LAYOUT

Running the layout job stream

The Job Layout Window can be used to load, create, modify and save layouts. It may be used to access the property page of the job to change it's attributes such as when it runs and what it does when it executes. It may also be used to create job streams that establish interdependencies between jobs.

In this step we will submit the first job in the stream (Start) and monitor the progress of the stream as it progresses. To Start the job, right click on the job icon. The menu shown below will appear. This multi-function menu can perform many of the most crucial scheduling tasks including Starting, Stopping, Suspending and Rescheduling and job streams. For this exercise, select **Start Now...** and click on **Submit** when the **Submit Options** dialog appears.

Tracking job progress in the job layout

There are a number of ways to track job progress in EnterpriseSCHEDULE including the Job Monitor, notifications, alert messages and current state information dialogs. You can also track job progress within the Job Layout by observing the changes in the job icons as the job advances through it's states. Some of the states are you will see are:

Waiting for Start time - This job has been assigned a time to start automatically and is being readied to start

Successfully completed - This job completed with a successful completion code and will now initiate subsequent jobs.

Submitted and Executing - This job is currently submitted and is executing. Notice the progress indicators displaying resource usage by the job.

4 WORKING WITH THE JOB MONITOR

Starting up the Job Monitor

The job monitor tracks job progress with an informative display that tracks job data as it occurs and records event data for past job runs. This historical data can help gauge the success or failure of jobs and help you track any problems and why they occur. The job monitor is accessible in three ways:
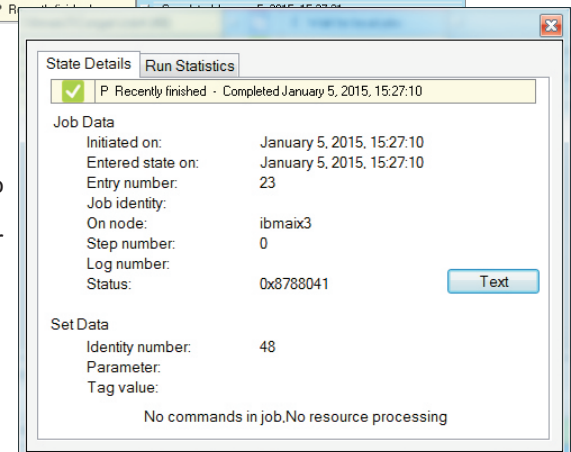
1. As a standalone application
2. As a pop up display from an individual job in the Job Layout
3. As a pop up display from an individual job from the Job Explorer

To bring up the job monitor for a particular job in the Job Layout, right click on a job as it is running and select **Monitor...**

Job details and log files

The monitor display lists the recent events that the job has progressed through, including the times of the events. You can right click on the job to view the job's log file, change the jobs properties or view it's current state. For now, select Job Progress. This will tell you the latest information for the job including any prerequisite jobs or resources that may be holding it.
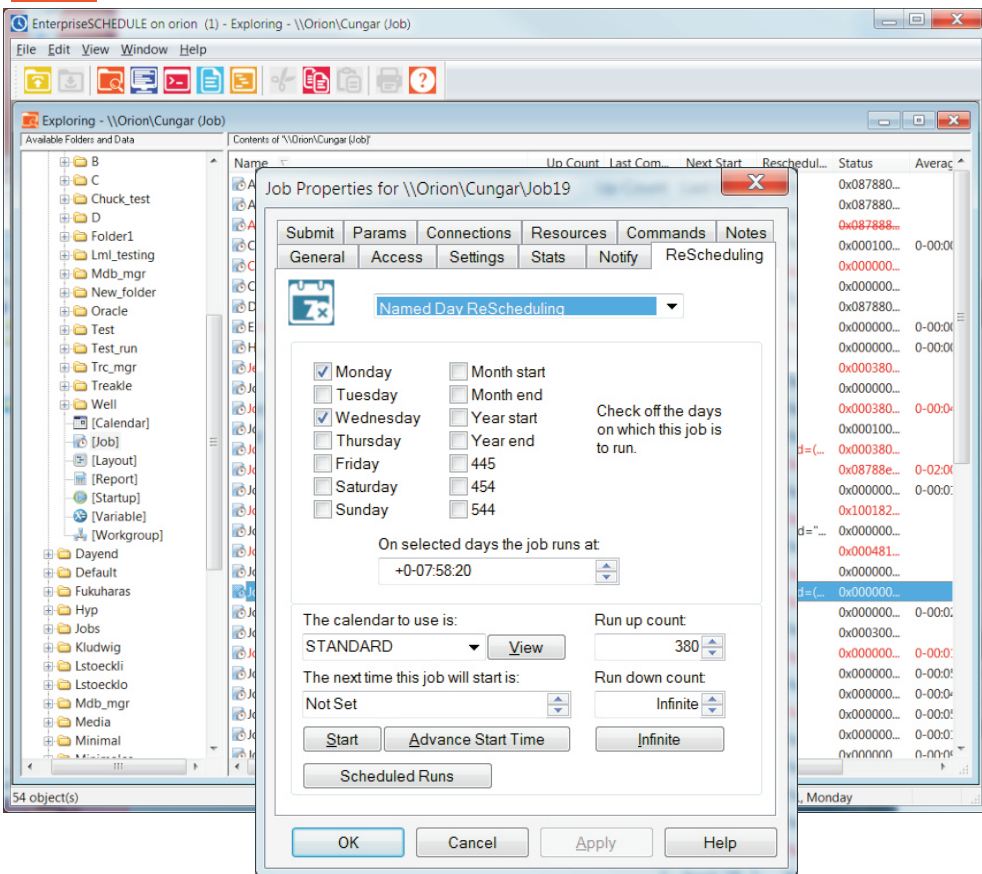
Viewing a Job Property Page in the Explorer View

The EnterpriseSCHEDULE Job Explorer is the point of access to all jobs, calendars, layouts etc. that make up the job scheduler. From this handy interface, you can access job descriptions, directories, calendars variables and all other built in objects. The Explorer features a interface modeled after the Windows Explorer and is therefore easy to learn and use. To open the Explorer, click on the Explorer icon.

Navigate to the jobs in your home folder (named after your current account) and find the A directory where the jobs that are in the A_Group layout. Now right click on any job. The pop up menu above will appear. As you can see, many of the operations that can be done from the layout can also be performed in the Explorer view. For this exercise, select Properties. This brings up the property page for the selected job where all job attributes are set.
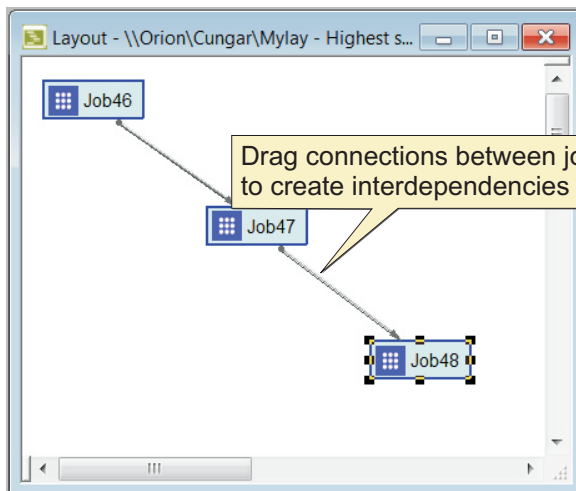
The job property page contains a wealth of important features of the job including what it does, how it runs and what it does after it completes. Feel free to look at all the tabs and begin to see the many features of EnterpriseSCHEDULE jobs. Among the properties are:

General features - shows information about recent job runs including when the the job completed and how long it took.
Rescheduling - allows you to set the way a job reschedules itself. The choices include running on a named day of the week, run at an interval and run based on the marks in a calendar.
Commands - is what the job does when it run. This can be a script, an executable or a shortcut.
Notify - descibes how the user can be notified when certain events occur. This can be via e-mail, pager or pop up notification.
Resources - this powerful feature lets you to base job runs on variables and other factors in order to add a higher level of control to job scheduling.
Connections - let you set the dependencies between jobs including initiates that start another job when the current job completes and prerequisites which hold up future jobs until completion

6 CREATE A NEW JOB STREAM

Now that you've worked with EnterpriseSCHEDULE, create a new layout and begin creating a simple job stream.

1. Click on the Layout icon to create a new Layout.

2. Click on the job icon and click 3 times across the layout to add new jobs.

3. Enter CTRL-S to save the Layout and enter a new name for the Layout. Click OK.

4. Click on the Job Connection tool and drag a connection from the first job to the second and the second to the third. Save the Layout again.

Drag connections between jobs to create interdependencies

5. Right click on a job and select **Edit>Commands** to enter the script or command list that the job will run when it executes.

Your Job Stream is now ready to run. Right click on the first job in the stream and Select Start Now and the jobs will run in succession, initiating the next job as each job completes.

This is just a small sample of what can be accomplished in EnterpriseSCHEDULE layouts. Job Streams can run across nodes or platforms, based on factors such as time, resource variables and completion status. Contact ISE for more on job streams and how they can automate your operations.

How to enter EnterpriseSCHEDULE Commands

EnterpriseSCHEDULE can be controlled, monitored and administered using commands that are described in the EnterpriseSCHEDULE Reference manual. Nearly all functions that are available in the Windows GUI can be accomplished using commands.EnterpriseSCHEDULE objects (jobs, layouts, calendars etc.) are organized in a two tiered directory structure that is internal to EnterpriseSCHEDULE and is not part of the UNIX directory structure. There are three ways to access the EnterpriseSCHEDULE line command shell.

1. Type SCHEDULE at the native OpenVMS shell command prompt

2. Click on the Command Prompt icon in the Windows interface.

3. Select All Programs > EnterpriseSCHEDULE > Command Prompt Remote from the Windows Start menu. This will put you in prompt mode in the Windows DOS shell.

For help on SCHEDULE commands:

```
Schedule> man command_name
```

To exit the SCHEDULE command prompt:

```
Schedule> exit
```

EnterpriseSCHEDULE command examples

To display the contents of a directory:

```
Schedule> lsjob -all
```

What it does: Displays all SCHEDULE objects in a directory including jobs, calendars, variables etc.

To change to another directory:

```
Schedule> cd /directory/
```

What it does: Sets the current default to a new directory.

To display the full characteristics of a job:

```
Schedule> lsjob -full=all job_name
```

What it does: Displays the complete job record including past run info, next start info, rescheduling etc.

To display a list of all jobs that are connected:

```
Schedule> more -initiate -prerequisite job_name
```

What it does: Displays a list of all the jobs that will be triggered and/or held up by this job.

To view the commands that will be submitted by a job:

```
Schedule> more -commands job_name
```

*What it does: Displays the list of script commands that this job will run when it is submitted.***To submit a job immediately:**

```
Schedule> submit -initiate -prerequisite job_name
```

What it does: Submits the designated job and any subsequent jobs that it will trigger upon completion.

To modify a job so that it runs on a one day interval:

```
Schedule> chjob -reschedule=interval:1-00:00:00 job_name
```

What it does: Modifies a job to run on a one day interval starting with the time set in the next start time (see following Command).

To modify a job so the next time it starts is 1:30 AM on February 12, 2006

```
Schedule> chjob -general=next:12-FEB-2006:01:30:00 job_name
```

What it does: Sets the next submission time. To begin a rescheduled submission cycle, the next submission time must be designated. After that submission takes place, the reschedule setting will take over and the job will continue to submit automatically.

To display job state changes

```
Schedule> monque -all
```

What it does: Displays the progress of all jobs as they go through the SCHEDULE queue states. The jobs progress, whether it is held up by resources, when it is executed and it"s completion state are all displayed in a dynamic display.

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