Job Activity

Overview

The **Job Activity** pane displays information about jobs presently in the production schedule. To see jobs that have been defined but that are not currently scheduled, you need to open the **Jobs** pane. For more information about the **Jobs** pane, see <Jumps>"Jobs" on page 139.

Note Remember that the security rights of a user will always affect what they are allowed to see in Scheduler. The Job Activity pane may show all jobs currently scheduled or only the jobs owned by the user and the user's workgroup, depending on the user's security policy.

The messages that display information about each job and group use different colored text to indicate their status, with a row background color of white. For example, carry over job rows display a background color of light gray.

Job groups are presented in bold with an expand or collapse button in the first column. All jobs in a job group are slightly indented and can be collapsed into and expanded from the group.

Use the scroll bars to view all the columns in the **Job Activity** pane. The **Job Activity** pane makes a large amount of important job information easily accessible. In the case of estimated start times and durations, the values displayed are periodically updated as new data becomes available. You can also press the **F5** key for an instant refresh.

The **Job Activity** pane displays can be customized through the **Preferences** dialog. For more information on how to customize the **Job Activity** pane, see "Job Activity Preferences Dialog" section on page 4-114.

If the schedule in the **Job Activity** pane is a "forecast" for a future date (**Forecast Only** option selected when creating a schedule), then the word "Forecast" displays after the date in the pane title bar.

Job Activity Pane Interface

From the **Navigator** pane, select **Operations > Job Activity** to display the **Job Activity** pane.

You can double-click a job in the **Job Activity** pane to open its **Job Details** dialog.

Note   When you view a particular day in the production schedule, all jobs that have not been launched on previous days will also appear (unless you have filtered them out). This includes jobs in Active, Waiting On Resources, Waiting On Operator, Waiting On Dependencies, Stopped, Held, Agent Unavailable and Agent Inactive states.

Buttons

The **Job Activity** pane contains the following buttons:

- **Refresh** – Refreshes the **Job Activity** pane.
- **Filter** – Displays the **Job Filter** dialog to customize the data that displays in the **Job Activity** pane.
- **View Time By** – Displays the **View Time By** dialog. Allows you to view jobs according to the time zone of the master doing the scheduling, the Tidal Web client you are using or an agent that you select.
- **Prior Day** – Displays the production schedule for the day before the one currently displayed.
- **Next Day** – Displays the production schedule for the day after the one currently displayed.
- **Select Day** – Displays the production schedule for "today" or any other day.
- **Print** – Displays the **Reports** pane to view and print the contents of the **Job Activity** pane. For more information, see <Jumps>"Monitoring Production" on page 361.
- **Graphical View** – Displays a graphical view of the **Job Activity** pane.

Search Field

Enter text that you want to search for within the columns displayed into this field.

Note   This field at the top right of the grids will only search text columns that are not grayed out and are string-based. See "Searchable Columns" on page 44.

Columns

The order of the columns listed in the **Job Activity** pane can be rearranged from the **Job Activity Preferences** dialog.

The **Job Activity** pane contains the following columns:

- **Job No.** – The job number is the instance identification number of the job or group occurrence. Each occurrence or instance of a job is assigned a unique tracking number when it is added to the schedule to distinguish it from any other occurrences of the job. It is possible that the same job may run several times during a day.
- **Name** – The name of the job.
- **Status** – The present status of the job. The color of text used for each job and Job Group is based on its status. You can customize the status colors and sort order using the **Preferences** dialog.
- **Current Est Start** – The estimated start time as of the current moment in time. This start time value is updated every minute.

- **Est Duration** – The estimated duration for the command or executable as specified in the job definition. If the job has run more than once with the same command or executable, the estimated duration is the historical average of the job's previous run times. You can also manually set the estimated duration time of a job in its definition.

- **Reruns** – Tracks the number of times that a job has run.

- **Est Start** – The estimated job time calculated using the estimated launch times and estimated durations of preceding jobs. This value is created at the time the production schedule is compiled.

- **Time Zone** – The assigned job timezone. The time value adjusts the timezone offset into Master time.

- **Job Time Zone** – The timezone the job was run in.

- **Act Start** – The job's actual start time after it has launched.

- **Act End** – The actual ending time and date for the job occurrence.

- **Act Duration** – The actual time that it took for the command or executable to run. The actual duration is used to calculate the historical average of the **Est Duration** field in the job's definition. The actual duration value is 0 until after the job completes.

> **Note**   The displayed value for the Actual Duration value of a job is updated every 90 seconds.

- **Date** – The production date of the job. If the job does not execute until the next day, this date stays the same, since it represents when the job was scheduled to run based on its calendar or when the job was inserted as an unscheduled job.

- **Time window** – The time window during which the job can run as defined in the job's definition. The default, 12:00 AM to 11:59 PM, effectively means the job is eligible to run anytime during the day.

- **Agent** – The name of the agent or agent list associated with the job, as specified in the job definition. This field displays the agent list name prior to the job running and then displays the chosen agent from the list after it is launched.

- **Queue** – The queue that the queue manager assigns to the job. The queue to which the job is assigned depends upon the job's properties, and the way that the queues are configured to assign jobs using queue filters.

- **Priority** – The job priority as defined in the job's definition. Job priorities are only relative to the job priorities of other jobs within its queue before running.

- **Runtime User** – The user account that the job runs under when it executes.

- **Scheduled By** – How the job entered the schedule. There are three options:
  - **Event** – The job was inserted by an action that was initiated by an event.
  - **Calendar** – The job was compiled into the schedule according to its calendar.
  - **On Demand** – The job was an ad hoc insertion through either operator action or the command line.

- **Owner** – The user who owns the job. If the job is owned by a workgroup, the owner of the workgroup. Note that this column does not display the workgroup name itself, but the owner of the workgroup.

- **Parent Group(s)** – All of the parent job groups that the job or job group belongs to. If the job or job group belongs to several job groups, the group path is shown.

- **Command** – The command, program or script that the job will execute, as specified in the job's definition. The command path is relative to the agent machine on which the job runs. The command data includes any command parameters.

- **Exit Code** – The exit code that the command returns when the job is complete. The exit code is one way of determining whether the completion status of the job is **Completed Normally** (the exit code equals 0) or **Completed Abnormally** (the exit code does not equal 0). The exit code value can range from 0 to 30,000.

- **Job Full Name** – The full directory path to the job and its job group name.

- **Job Type** – The type of job.

- **Parent Group** – The immediate parent job group that the job or job group belongs to.

- **Job Class** – The job class the job is assigned to, if any.

- **Alias** – An alternate name for the job, as set in its job definition. The job alias is limited to eight characters and due to this limitation is often used in the command line mode to refer to a job.

- **Predecessors** – The job dependencies that have to be fulfilled before this job can run. This job will not run until the **Predecessors** have fulfilled the conditions set in this job's definition.

- **Successors** – Jobs that use this job as a job dependence. This job must fulfill a certain condition before **Successors** can run.

- **Group Instance** – The group instance number applies only to jobs and groups with a parent group. As opposed to the day instance number (also known as the job ID) which is unique, the **Group Instance** is relative to other jobs in the parent group.

- **Agent Instance** – The agent instance number applies only to broadcast jobs. For more information on broadcast jobs, see Controlling Production. The **Agent Instance** is relative to other jobs run by the same agent.

- **Ext ID** – This number corresponds to the **External ID** field in a job's **Job Detail** dialog. This number is the process ID number that the Windows operating system assigns to the highest level process within the job. If this is a SAP or PeopleSoft job, the Ext ID is the same as the SAP or PeopleSoft job ID.

- **WaitOp** – Indicates if a job is waiting for the operator to release it.

- **Calendar** – Displays the name of the calendar associated with the job instance.

Each column can be sorted in either ascending or descending order. Click any column name to change the column sort. For example, click **Name** on top of the **Name** column. The items in the column alphabetize from **z** to **a**. Click **Name** again and the items alphabetize from **a** to **z**. For a column that is numerical, the sort changes from earliest to latest time, or latest to earliest time.

Job Activity Preferences Dialog

Select **View>Preferences** from the main menu bar while viewing the **Job Activity** pane to display the **Job Activity Preferences** dialog.

Columns Tab

From the **Columns** tab, you can select which columns are displayed in the Job Activity pane and in what order they appear.

- A checkmark to the left of a column title indicates that it will be displayed in the pane. No checkmark indicates that it will not be displayed.

- To rearrange the order in which the columns are displayed, select the column and click the up or down arrow.

Status Color Tab

The **Status Colors** tab lists every possible status a job can have. From the drop-down menu to the right of each field, you can select the color to represent that status in the **Job Activity** pane.

Grid Background Color Tab

On the **Grid Background Color** tab select an option from the drop-down menus to the right of each field. You can select the color to represent the grid background color in the **Job Activity** pane.

Navigator Context Menu

When you right-click in the **Navigator** pane while viewing the **Job Activity** pane, the Navigator context menu displays.

This context menu contains the following options:

- **Statistics** – Displays the **Job Statistics** dialog showing the number of scheduled and unscheduled jobs in the present day's production schedule.

- **Filter** – Displays the **Job Filter** dialog to filter the job occurrences that are displayed in the **Jobs** pane according to criteria you select. Has the same function as the **Filter** button on the toolbar. You can also custom-sort job occurrences. For more information about the **Job Filter** dialog, see <Jumps>"Job Filter Dialog" on page 126.

- **Group Display** – Selecting **Group Display** brings up the **Group Display** submenu with the following menu options:
  - **Expand Selected** – Expands one level on the selected job group, displaying its child jobs. If multiple groups are selected, only the first group selected is expanded.
  - **Collapse Selected** – Collapses one level on the selected job group, hiding its child jobs. If multiple groups are selected, only the last job group selected is collapsed.
  - **Expand All** – Expands all levels on the currently selected group, respectively.
  - **Collapse All** – Collapses all levels on the currently selected job groups to hide all child jobs.

- **Prior Day** – Displays the production schedule for the day before the one currently displayed. Has the same function as the **Prior Day** button on the toolbar.

- **Next Day** – Displays the production schedule for the day after the one currently displayed. Has the same function as the **Next Day** button on the toolbar.

- **Select Day** – Displays a calendar from which you can select the date whose production schedule you want to view. Has the same function as the **Select Day** button on the toolbar.

- **Save View As** – Displays the **Save View** dialog to name the view that you would like to save.

- **New Root Folder** – Displays the **New Root Folder** dialog to name the new root folder that you would like to create in the **Navigator** pane.

- **New Sub Folder** – Displays the **New Sub Folder** dialog to name the new sub folder that you would like to create in the **Navigator** pane.

- **Preferences** – Displays the **Preferences** dialog for the **Job Activity** pane.

- **Print** – Displays the **Reports** pane to view and print your connection definitions. Has the same function as the **Print** button on the toolbar. For more information, see <Jumps>"Monitoring Production" on page 361.

- **Export** – Saves the data in the current pane as an ASCII text file. You can then use the file data in other applications.

- **Refresh** – Updates the data in the current pane.

Job Activity Pane Context Menu

When you right-click in the **Job Activity** pane, the **Job Activity** context menu displays.

The **Job Activity** context menu contains the following options:

- **Refresh** – Updates the data in the **Job Activity** pane.

- **Filter** – Displays the **Job Filter** dialog to filter the job occurrences that are displayed in the **Jobs** pane according to criteria you select. You can also custom-sort job occurrences. For more information about the **Job Filter** dialog, see <Jumps>"Job Filter Dialog" on page 126.

- **Print** – Displays the **Reports** pane to view and print your jobs. Has the same function as the **Print** button on the toolbar. For more information, see <Jumps>"Monitoring Production" on page 361.

- **Print Selected** – Displays the **Reports** pane to view and print your job selections.

- **View Time By** – Selecting **View Time By** displays the **View Time by Agent** dialog. From here, you can choose to view job times according to the time zone of your master, current Tidal Web client or an agent that you specify.

- **Group Display** – Selecting **Group Display** brings up the **Group Display** submenu. The menu options are as follows:

    - **Expand Selected** – Expands one level on the selected job group, displaying its child jobs. If multiple groups are selected, only the first group selected is expanded.

    - **Collapse Selected** – Collapses one level on the selected job group, hiding its child jobs. If multiple groups are selected, only the last job group selected is collapsed.

    - **Expand All** – Expands all levels on the currently selected group, respectively.

    - **Collapse All** – Collapses all levels on the currently selected job groups to hide all child jobs.

- **Prior Day** – Displays the production schedule for the day before the one currently displayed.

- **Next Day** – Displays the production schedule for the day after the one currently displayed.

- **Select Day** – Displays a calendar to select the date whose production schedule you want to view.

- **Graphical View** – If you selected the **Use New Graphical View Layout Manager** option on the **Other** tab of the **System Configuration** dialog, this option displays instead of the View option. Select this option again to return to the original view. (Refer to <Jumps>"Business Views Pane Interface" on page 263 for more information.) If this option is selected (a check mark is beside the option), the following menu options also are available.

- **Details** – When in the **Jobs** pane, displays the **Job Detail** dialog for the selected job occurrence. Alternately, you can display these dialogs by double-clicking the individual job record.

- **Statistics** – Displays the **Job Statistics** dialog showing the number of scheduled and unscheduled jobs in the present day's production schedule.

- **Goto Now** – Sets the job pane's date to the current date.

- **Job Control** – Displays a submenu with options for manipulating jobs. For more information on job control menu options, see <Jumps>"Job Control Submenu" on page 117.

- **Insert Job into Schedule** – Adds one new occurrence of the selected job into the production schedule regardless of the job's (or job group's) calendar setting or number of times the job is scheduled to repeat during the day. When a job or a job group is added, and the job or job group already resides in the production schedule, an incremented occurrence number appears next to the job occurrence in parentheses, i.e., **Job A (2)**.

- **Remove Job(s) from Schedule** – Removes the selected job occurrence from the production schedule. If you wish to remove all future occurrences of the job within the schedule, select the **All** option in the **Confirmation** dialog. The job occurrence cannot be removed unless it has a pre-launch status.

- **Require Operator Release** – Holds the job until an operator releases it. The job will not run until it is released. When all the job's dependencies are met, and it is ready to run, its status is **Waiting On Operator**. The information in the **Operator Instructions** field (**Description** tab) can inform the operator of any external requirements that need to be met before the job is released.

- **List Instances** – Lists all job instances

- **Successors** – Advises which jobs, if any, are dependent on the currently selected job.

Job Control Submenu

When you select **Job Control** from the **Job Activity** context menu, a submenu displays.

> **Note**   After selecting a job control action from the menu, a context dialog confirms the success or failure of the action.

This submenu contains the following options:

- **Override** – Overrides all unmet dependencies and changes the selected job status from **Waiting On Dependencies** to **Waiting on Resource** or **Waiting On Operator**. The job must have the status of **Waiting On Dependencies** for this job control function to be available. (For information on overriding individual dependencies, refer to <Jumps>"Dependencies Tab" on page 121.)

- **Hold/Stop** – When a job is in the **Held** or **Stopped** state, the execution of the job will not begin or continue until it is manually released. Because Windows does not support the pausing and resuming of a process, the **Hold/Stop** option is not available for Windows jobs.

- **Hold** – Changes the selected job status from **Waiting On Dependencies**, **Waiting On Resource, Agent Inactive**, or **Agent Unavailable** to **Held**. When a job group's occurrence is selected, places all waiting jobs in **Held** status, and all active jobs in **Stopped** status.

- **Stop** – Changes the selected job status from **Active** to **Stopped**.

- **Release/Resume** – This command recommences the execution of a job at the point at which it was stopped (suspended). On non-Windows agents, the **Release/Resume** command can also take a job in the **Held** state and release it so that it will launch once all of its dependencies have been met. Because Windows does not support the pausing and resuming of a process, the **Release/Resume** option is not available for Windows jobs.

  - **Release** – Changes the selected job status from **Waiting On Operator** or **Held**, to **Active** (with an intermediate **Scheduled** state). When a job group's occurrence is selected, **Release** changes the job group's status from **Waiting On Operator** to **Active** (with an intermediate **Scheduled** state), and changes all child job statuses from **Waiting On Group** to **Scheduled**.

- **Resume** – Changes the selected job status from **Stopped** to **Active**. Also changes the selected job status from **Held** to **Waiting On Dependencies** (with an intermediate **Scheduled** state). When a job group's occurrence is selected, changes its status from **Held** to **Active** (with an intermediate **Scheduled** state). All child jobs that were **Stopped** become **Active**, and all that were **Held** become **Waiting On Dependencies**.

- **Cancel/Abort** – Prevents or stops a job from running in the production schedule. TES agents react differently when a job with child jobs is aborted, depending upon the agent type and operating system.

Table 4-1   Agent Cancel/Abort Behavior

Type of Agent	Abort Behavior of Jobs
Agent for Windows	When TES launches a job, a Windows Job Object is created that spawns the actual job process. Aborting the job in TES, destroys the job object and kills the job process. If you abort a job on Windows, all of its child processes are aborted also.
Agent for Unix	Aborting a job sends a SIGTERM (request to terminate) message to the job and its child processes before sending a SIGKILL message that actually kills all of its child processes. The interval between the SIGTERM and SIGKILL signals can be configured. More information on configuring agent parameters is available in *Installing the Unix Agent* chapter of the *Installation and Configuration Guide*.

- **Cancel** – Changes the selected job status from **Agent Inactive**, **Agent Unavailable**, **Deferred**, **Held**, **Waiting On Dependencies**, **Waiting On Operator**, or **Waiting On Resource** to **Canceled**. Canceled jobs do not run in the production schedule.

- **Abort** – Changes the selected job status from **Active** or **Stopped** to **Aborted**, and kills the active job process on the system.

⚠ **Caution**   Avoid excessive aborting of job processes as this may lead to system instability. Instability may appear after more than 10 job aborts. Restore system stability by rebooting the agent machine.

When selecting **Cancel/Abort** you can choose to release the selected job's dependents. If you choose to release, the dependent job will no longer be dependent on the job you are canceling or aborting.

- **Cancel Pending** – Stops or prevents a job instance from running but overrides the dependencies in the job stream so that children of the job will consider the parent to have completed normally. In a job group, all of the children also go to **Cancel Pending** status. Once all of the dependencies of the jobs in **Cancel Pending** status complete, the jobs end in a **Cancel Normally** status which is considered the same as **Completed Normally**.

- **Cancel/Abort All** – Prevents all occurrences of a job that are not complete from running in the production schedule. When you select **Cancel/Abort All**, you can choose whether to release the selected job's dependents. If you choose to release, the dependent job will no longer be dependent on the jobs you are canceling or aborting.

- **Rerun** – Changes the selected job status from **Aborted**, **Completed Normally, Completed Abnormally** or **Error Occurred** to **Active** (with an intermediate **Scheduled** state). A new instance ID of the job is not created. You cannot rerun a job with the status of **Externally Defined**, **Orphaned** or **Skipped**.

- **Set** – Changes the selected job or job group completion status. The selected status can affect all other jobs dependent on that job or job group. When a status is changed with this command, an asterisk appears after the new status. For example, **Completed Normally***. You can choose from the following: **Completed Normally**, **Completed Abnormally**, **Externally Defined**, **Error Occurred**, **Orphaned** or **Skipped**.

View Time By Dialog

The **View Time by Agent** dialog displays by clicking the **View Time By** button on the TES toolbar while in the **Job Activity** pane.

This dialog configures the times displayed in the schedule according to the time zone of one of the system components. TES may be managing a production schedule that includes components that are spread out over a wide geographic area. This geographic area may encompass several time zones. When you are scheduling jobs over diverse timezones you have to account for the fact that the master, agent and Tidal Web client may be in different time zones.

> **Note**   You can configure the jobs to run according to the timezone used by the master or by the agent from the Timezone tab of the System Configuration dialog. Master and Job Based Timezone offset will be applied into all time value for that job.

You can configure the Tidal Web client to display the estimated and actual times of jobs from the viewpoint of one of the following components:

- **Master** – The master controlling the production schedule
- **Client** – The Tidal Web client being used
- **Job** – The job being run
- **Agent** – The agent running the job

Job Detail Dialog

The **Job Detail** dialog displays when you double-click a job occurrence record in the **Job Activity** pane or right-click and select **Details** from the context menu.The details shown for a job differ from the details for a job group, thus while the **Job Details** dialog for a job group is very similar, it does not have the same tabs as a job does.

Common To All Tabs

- **Job Name** – The name of the job as defined in its job definition.
- **Job No.** – The job's instance number.

- **Print** – Clicking this button displays a report that lists the same fields of information contained within on the various tabs of this **Job Detail** dialog. This report can be saved or printed. You can elect to display the report with or without the job output if the job has run.

- **Defaults** – This button becomes available whenever you make a change to the job's parameters from the **Override** tab. Clicking the **Defaults** button after a change returns all the fields on the **Override** tab to their original values. The **Defaults** button is then unavailable until the next override change. This button is unavailable from the other tabs of the dialog.

Status Tab

This tab contains the following elements:

- **Status** – The job's current status.

- **Est. Start Time** – Estimated job launch time based on its time dependencies and the launch times and estimated durations of preceding jobs. You can view all the dependent jobs on the **Dependencies** tab.

- **Act. Start Time** – The time the job became active. Until the job is active, this field is empty.

- **Est. Duration** – The estimated time it will take for the job to run. If the job has never run before, it contains the value in the **Estimated Duration** field in the job's definition. Otherwise, it contains a historical average of the **Actual Duration**.

- **Act. Duration** – The actual time the job took to run.

- **Job Owner** – The user that owns the job.

- **Scheduled By** – Indicates how the job entered the production schedule. Three possible values may be displayed here:

    - **Calendar** – Compiled into the schedule based on an assigned calendar.

    - **Event** – Inserted by a job action based on an event trigger.

    - **On Demand** – Inserted by an operator via the Tidal Web client, command-line, API or Web Service.

- **Exit Code** – The exit code of the completed job (if the job has not completed, this field is blank). This field is not displayed for a job group. Exit code values mean:

    - if the value equals 0, the job has completed normally

    - if the value does not equal 0, the job has completed abnormally

- **External ID** – By default, this is the ID number assigned to the job process by the operating system. Certain job types have an **External ID** assigned by third party software, such as SAP or PeopleSoft.

- **Reruns** – The number of times the job has rerun for the day.

- **Disable Carryover** – Selecting this option prevents the job from being carried forward to the next day's schedule if the job does not run on its scheduled day. If the **Try again tomorrow option** in the **If not ready by end of day** field on the **Schedule** tab of a job definition is selected, it will override the **Disable Carryover** option and the job *will* run on the next day.

Audit Log Tab

Displays both user-initiated job interaction and production schedule audit trail messages for the job including job control actions, job occurrence status changes and errors.
Double-click a record to display its details more clearly.

This tab displays the following information:

- **Time** – The date and time the audit was recorded.
- **Description** – The job audit or error message describing the change/error to the job. Audit information is retained according to the audit retention setting in the **System Configuration** dialog.
- **User** – The user that submitted the job.

Output Tab

Displays the standard output of the job. TES can be configured to save or discard job output by default from the **Defaults** tab of the **System Configuration** dialog. Regardless of the system default, any individual job instance can be configured from its job definition to override the system default.

- If the **Append** option in the **Save Output** field on the **Options** tab of the job definition is selected in the job's definition, the job's standard output file is transferred to the master and displayed on this tab. Each time a job is rerun that run's output is separated by a block of number signs (#).
- If the **Replace** option in the **Save Output** field is selected, then only the output from the last job instance that ran is saved. The output from the previous time that the job ran is overwritten.
- If the **Discard** option of the **Save Output** field is selected than this tab will not have any job output displayed here.

If a job is canceled before it can complete, any partial output that was generated during the processing of the job displays on the **Output** tab. Note that a job group does not have an **Output** tab in its **Job Details** dialog.

> **Note**   Scheduler's default is to discard job output. To save or append job output or to specify that the output be produced in summary format, change the system default on the Defaults tab of the System Configuration dialog. This can be adjusted for individual jobs from the Options tab of that job's Job Definition dialog.

You can refresh the output if parameters have been changed after runtime by clicking **Refresh output**.

Dependencies Tab

Shows all predecessors (job, file, time and variable dependencies) needed before a job can run. It also displays all successors occurring after the job runs.

From the **Dependencies** tab, you can override individual job dependencies for a job instance (but not for a job group). (To override all of a job instance's dependencies, refer to the override section of the <Jumps>"Job Control Submenu" on page 117.) Other instances of the job are not affected when you override a dependency.

There are three ways to override a dependency:

- Select the dependency in the **Predecessors** field and click the **Override** button.

- Select the dependency in the **Predecessors** field, right-click to display the context menu and choose the **Override** option.

- Select the dependency in the **Predecessors** field and use the keyboard shortcut, **Ctrl+O.**

This tab contains the following elements:

- **Include dependencies already satisfied option** – When not checked, only dependencies that have not been met are displayed. Otherwise, met dependencies are displayed with a green box outlining the dependency's icon. The default is checked to show all predecessors and successors.

- **Predecessors** – Displays files, times that must be met and hierarchical trees of earlier jobs that must reach a particular status before this job can run. Jobs on higher levels of the hierarchies depend upon jobs in lower levels.

- **Override Button** – Select a specific dependency and click the **Override** button to override the dependency for a job instance.

- **Successors** – Displays a hierarchical tree of jobs that are dependent on the job in question. Jobs on lower levels of the hierarchies depend on the jobs above.

File Dependencies

File dependencies are defined in the job's definition dialog, and are displayed with a file icon, the file's path name and the dependency expression (Exist, Not Exist, etc…).

Job Dependencies

Job dependencies are defined in the job's definition dialog and are displayed with a job icon, the job's name, the selected logical operator (=, <>, etc…), its target status, and the present status. If the job is not currently in the production schedule, the icon changes to the not-in-schedule icon.

Note To have a job ignore a job dependency when the dependency is not in the schedule, select the Ignore dependency if job not in schedule option in the Job Dependency Definition dialog.

Time Dependencies

Time dependencies are displayed with a time icon, and indicate the time when the time dependency will be met.

Variable Dependencies

Variable dependencies are defined in the job's definition dialog and are displayed with a variable icon, the variable's name, its dependency expression and its present value in parentheses.

Resources Tab

The **Resources** tab of the **Job Detail** dialog displays information about any resources assigned to a job. The current and required system resource values, with a column showing the status of the resource, displays on this tab. In the case of a job that uses an agent list and has not yet been assigned an agent from the list, the current and status columns are grayed out.

The possible statuses for the resource are:

- **Available** – The resource is available. The job cannot use the resource until all of its needed resources are available at the same time.

- **Unavailable** – The resource is unavailable.

- **Waiting** – The resource is not available because another job is using the resource.

- **Locked** – The job is running. All of the listed resources will display the Locked status. A job cannot run until all of its assigned resources are simultaneously available. When the resources do become available to the job, the job locks up its share of each resource until the job completes and the resource is released for use by other jobs.

  A resource in a **Locked** status cannot be overridden to release it but a user could modify the resource's definition to temporarily increase its limit and make more of the resource available to other jobs.

  > **Note**   Resources cannot be assigned to a job group. If this is a job group definition, then the Resources tab is not displayed.

The **Resources** tab contains the following elements:.

- **Resource Consumption**
  - **Type** – The kind of resource that is being used, **Virtual** or **Agent**.
  - **Resource Name** – Displays the name of the resource associated with the job.
  - **Amount Used** – The amount of the resource's specified limit that the job uses. This number cannot exceed the number shown in the **Amount Available** column.
  - **Amount Available** – The amount of the resource that is available to be used. This number is derived by subtracting the amount of the resource currently in use from the limit specified in the resource's definition.
  - **Status** – Denotes the status of a resource assigned to the job. There are three possible statuses:

    Available – The resource is available for the job.

    Waiting – The resource is not currently available. The job is unable to run until the specified amount (shown in the **Amount Needed** column) of the resource is available.

    Locked – The resource is being used by job. The amount of the resource being used by the job (shown in the **Amount Used** column) is unavailable to any other job until this job completes. If multiple resources are required for the job, then an all or nothing approach is used. No resource is locked up until all of the required resources are available and can be locked simultaneously.

    > **Note**   A resource in a locked status cannot be overridden to release it but a user could modify the resource's definition to temporarily increase its limit and make more of the resource available to other jobs.

- **Resource conditions**
  - **Type** – The kind of resource that is being used, **Published** or **Custom**.
  - **Resource Name** – Displays the name of the resource associated with the job.
  - **Current** – Displays the current value.
  - **Condition** – Contains the conditional operators depending on the data type of the resource.

- **Required** – Displays the amount of the resource needed by the job. This amount is defined in the **Resource Requirement Definition** dialog.

- **Status** – Denotes the status of a resource assigned to the job. There are three possible statuses:

   Available – The resource is available for the job.

   Waiting – The resource is not currently available. The job is unable to run until the specified amount (shown in the **Amount Needed** column) of the resource is available.

   Locked – The resource is being used by job. The amount of the resource being used by the job (shown in the **Amount Used** column) is unavailable to any other job until this job completes. If multiple resources are required for the job, then an all or nothing approach is used. No resource is locked up until all of the required resources are available and can be locked simultaneously.

Variables Tab

Displays the variables used by the job group. These variables are isolated from any changes to their values that occur outside of this job group and its parent or child groups. The **Job Details** dialog for a job does not have a **Variables** tab.

Override Tab

Displays job properties that can be changed for this occurrence at any time while the job is waiting to run. After a job runs, it is only useful to change these values if you rerun the job. Changes made only affect the instance and not the rule as defined in the **Job Definition** dialog. The **Job Details** dialog for a job group does not have an **Override** tab.

> **Note** After changing any of these values and clicking OK, you are prompted to confirm the changes, and you are given the choice to apply the changes to all occurrences of the job in today's schedule if this is a repeating job. This applies to all repeating jobs that have not run yet, and all additions of this job that were inserted manually.

This tab contains the following elements:

- **Agent** – The agent that the job runs on. This is useful if the job failed on one agent and you want to rerun it on another. You can select from a list of active agents only. Be sure to choose an agent platform that will support the command in the command field.

- **Agent List** – The list of available agents that can run the job. The master assigns an agent to the job only when the job's dependencies are met and the job is ready to run. The master assigns an agent according to demands of the production schedule and the agent's job limit at the time that the job is ready to run.

> **Note** Since the agent is not assigned to a job until the last minute, if a user looks at a Job Details dialog before the job runs (e.g., the job is in a Waiting on Dependencies state), the Agent field on the Override tab is empty. The master does not select an agent from the agent list displayed in the Agent List field until the job's dependencies are met and the job is ready to run. Only then is the agent selected and the name of the agent displayed in the Agent field. If the job reruns, the master may assign a different agent from the agent list according to the demands of the production schedule.

- **Queue** – Normally, jobs are automatically assigned to queues. You can use this field to override the automatic assignment. You may want to do this if the present queue is too full to run the job any time soon.

- **Runtime User** – The runtime user, if any, assigned to the job. If that user account is currently experiencing problems, you can select another runtime user in this field.

- **Priority** – The job priority. This value ranges from low (0) to high (100). This value is used to prioritize job execution by comparing with other jobs within the job's destination queue.

- **From Time** – The start of a job instance's time dependency pane. By modifying the time within this field, you can override the time dependency.

- **Until Time** – The end of a job instance's time dependency pane. Modifying the time in this field overrides the jobs's time dependency.

- **Remove Time Dependency** – This button clears the values entered in the **From Time** and **Until Time** fields, removing the time dependency for this job instance.

- **Defaults** – This button becomes available whenever you make a change to the job's parameters from the **Override** tab. Clicking the **Defaults** button after a change returns all the fields on the **Override** tab to their original values. The **Defaults** button is then unavailable until the next override change.

Runbook Tab

The **Runbook** tab is intended to supply any instructions for the user relative to the execution of this job. This field can be used effectively with the **Require operator release** option in the job's definition.

Notes Tab

Use this field to enter other notes concerning the job.

This tab contains the following elements:

- **Other Notes** – A free text field where you can type any instructions for the operator, up to 255 characters long or enter a web address that provides relevant information about the job. If you selected the **Require operator release** option on the **Options** tab, you could use this field for detailed reminders about the circumstances under which to run this job with the **Require operator release** option selected.

  A web address or network directory address can be entered here and if the **Load URL** option is selected, the specified directory or web page from an internet site or a company intranet site displays. The web page or directory pane that displays here is an active pane that can be refreshed and whose links and folders can be accessed by clicking. You can right-click a web page in this field to display a context menu of the same options available in the web browser.

- **Load URL** – If a web URL is entered in the text field and this option is selected then that web page displays in the text field. This web address can be for an internet site or a company intranet site. This can be very useful if information pertaining to a job is stored on a company intranet.

History Tab

Details the job run history of every occurrence of this job in the production schedule sorted by **Start Time** and then by job number in descending order. The history includes jobs that have completed and jobs currently waiting to run either as repeated jobs and/or in future days of the production schedule. The history is retained according to the retention history setting in the job's definition.

> **Note**   Columns in the History tab can be resized by clicking the right border bar and dragging left or right.

This tab contains the following elements:

- **Job No.** – The unique number assigned to the job occurrence (day instance).

- **Date** – The date on which the occurrence was scheduled to run.

- **Status** – The present or final status of the occurrence. For a description of job statuses, see <Jumps>"Jobs" on page 139.

- **Act Start Time** – For past or present jobs, the actual time the job occurrence started. For future jobs, this field is blank.

- **Act End Time** – For past jobs, the actual time the job occurrence ended. For jobs currently running or future jobs, this field is blank.

- **Act Duration** – The actual duration of the job.

- **Est Start Time** – For past or present jobs, the time the job was estimated to start. For future jobs, the estimated time the job occurrence is expected to start. The start time may vary due to system resource utilization, and job dependencies.

- **Reruns** – The number of times the job has been rerun.

- **Command** – The command path, name and parameters that were executed for the occurrence of the job.

- **Priority** – The priority of the job when the job ran.

Job Filter Dialog

The **Job Filter** dialog displays by right-clicking in the **Job Activity** pane and selecting the **Filter** option from the context menu.

The **Job Filter** dialog allows you to perform the following tasks:

- View only the jobs that have the statuses that you want to see.

- View jobs using wildcards to specify the job name.

- View jobs that are running or ran on a specific agent.

- View jobs that are owned by a specific user.

- View jobs that are run as a specific user.

- View jobs that belong to a specific job class.

- View jobs that will run in a certain queue.

- View jobs that run a certain command

- View only jobs, only job groups, or both.

Note Filters only apply to jobs within groups, not to groups themselves. Groups are only displayed if at least one child within the group passes the filter criteria. If, according to the criteria, the group would be empty, the group is not displayed. If the Show Groups option is not selected, groups are ignored completely, and filters apply to the individual jobs which are now displayed outside of their group.

Status Filter

Use this filter to view only jobs with the statuses you are interested in. The default is all statuses (all selected).

The **Job Filter** dialog contains the following status viewing options:

- **Aborted** – Shows all jobs that were actively running and were aborted by the operator.

- **Active** – Shows all jobs that are currently running in the production schedule. Jobs that run longer than a day are shown on the day it started.

- **Agent Disabled** – Shows all jobs that could not launch because their assigned agent is inactive.

- **Agent Unavailable** – Shows all jobs that cannot run because their assigned agent is either not online or not presently connected.

- **Canceled** – Shows all jobs that were canceled by the operator.

- **Completed Abnormally** – Displays all jobs that completed with an exit code outside the designated normal range of values.

- **Completed Normally** – Displays all jobs that completed with an exit code within the designated normal range of values. This is configured on the **Run** tab of the job definition. The default exit code is 0 if a range of values is not specified.

- **Deferred** – Shows all jobs that were deferred because another occurrence of the job was running when the job was launched. These jobs have their concurrency option set to **Deferred** in their job definition.

- **Error Occurred** – Shows all jobs where an error occurred that prevented the job from running. Error messages can be examined in the **Job Details** dialog.

- **Externally Defined** – Shows all jobs that have a completion status defined by an external program.

- **Held** – Shows all jobs that were put on hold by an operator.

- **Launched** – Shows all jobs that are being launched by the Queue Manager.

- **Orphaned** – Shows all jobs where the connection between the agent and master failed while the job was running, and thus the job's status is unknown.

- **Scheduled** – Shows all jobs that have been scheduled to run on future days, and jobs running today where the status has not yet been determined.

- **Skipped** – Shows all jobs that were skipped because another occurrence of the job was running when the job was launched. These jobs have the **Skip** option set in the **If job is currently running** field on the **Options** tab of their job definition.

- **Stopped** – Shows all active jobs that were stopped by an operator. Jobs can be resumed by using the **Release** job control menu item.

- **Timed Out** – Shows all jobs that could not launch during their date and time window and will never run because **Timeout** is selected in the **If not ready by end of day** field on the **Schedule** tab of the **Job Definition** dialog.

- **Timed Out for Day** – Shows all jobs that missed or could not launch during their time window and cannot run for the rest of the day. These jobs will be carried forward to the next day because the **Try again tomorrow** option is selected in the **Schedule** tab of the **Job Definition** dialog.

- **Waiting on Children** – Shows all parent job groups that are waiting for their children to reach the necessary status.

- **Waiting on Dependencies** – Shows all jobs that are waiting on time, variable, file or job dependencies. You can view all the job dependency information from the **Job Details** dialog by double-clicking the job in the **Jobs** pane.

- **Waiting On Group** – Shows all jobs that are waiting on their job group's dependencies to be satisfied. You can view the job group dependencies information from the **Job Details** dialog by double-clicking the group in question in the **Jobs** pane.

- **Waiting on Operator** – Shows all jobs that have passed their dependency tests, and are waiting for an operator to release it. The job can be released using the **Release/Resume** job control command.

- **Waiting on Resource** – Shows all jobs that are waiting for an agent to free resources so that the job can run.

Note   When the Status column is sorted, the sort order is defined by the sort order listed in the System Configuration dialog. For more information about the System Configuration dialog, see, "System Configuration" on page 68.

Hours

Use this section to filter for jobs that run only during certain hours. Select the check box for each hour you wish to filter for.

Other Filters

- **Job** – Shows all the job occurrences matching the wildcard string specified. You can use the following wildcard characters.

    - ***** (Asterisk) The asterisk character masks any number of characters on and to the right of the location it is placed. For example, **A*** will match (allow in) **AB**, **ABB**, and **ABBB**.

    - **?** (Question Mark) The question mark masks one character in the location it is placed. For example, **A?A** will match **ABA** and **ACA**, but not **ABB** or **ABBA**.

    - **[x, y, z]** The brackets with commas let you specify a set of characters to filter in to that location in the string. For example, **A[X,Y]B** accepts **AXB** and **AYB** but not **AAB**.

    - **[a-z]** You can also specify ranges within brackets. For example, **A[X-Z]B** filters in **AXB**, **AYB**, and **AZB** but not **AWB**.

- **Group** – In this text field, type the name of a group filter. The groups configured with this filter are displayed as well as their children.

- **Agent** – Shows all job occurrences that run under the selected agent. When no agent is selected, all agents are assumed.

- **Owner** – Shows all job occurrences that belong to the selected user or workgroup.

- **Runtime User** – Shows jobs assigned to the selected runtime user.

- **Job Class** – Shows jobs belonging to the selected job class.
- **Queue** – Shows all job occurrences that run in the selected queue.
- **Command** – Shows all jobs that execute the selected command.
- **Calendar** – Displays all jobs that use the selected calendar.
- **Show Jobs** – Displays all jobs meeting the defined filtering criteria. No jobs display if this is not selected, though job groups display if the **Show Groups** option is selected.
- **Show Groups** – Displays a job group if it meets the defined criteria. No job groups are displayed if this option is not selected.
- **Show Carryover** – Displays any jobs that carried over from previous production dates.
- **Show Scheduled Only** – Displays jobs that were compiled as part of the original production schedule. The **Show Ad Hoc Only** option cannot be selected if this option is selected.
- **Show Ad Hoc Only** – Displays jobs that were not part of the original production schedule but were manually inserted into the schedule by an operator.The **Show Scheduled Only** option cannot be selected if this option is selected.

> **Note**   Jobs that did not finish on their production dates carry over only if the Carry Over Unfinished Schedule option was selected on the Master tab of the System Configuration dialog.

- **Server Side Filter** – Select this option if the job filter criteria does not change very often. This option improves performance by reducing network traffic. With this option selected, only jobs meeting the defined criteria are downloaded to the Tidal Web client when the **Job Activity** pane is selected. Once the filter criteria is changed, jobs are filtered again according to the new criteria and downloaded again.

  If the option is not selected, all jobs are downloaded first and then filtered by the Tidal Web client to meet the defined criteria. After the initial download it is quicker to refilter the jobs from the Tidal Web client since they do not have to be downloaded again.

- **Defaults** – Resets the job filter criteria to the default options. The defaults include all statuses, all hours, and the **Show Jobs**, **Show Groups** and **Show Carryover** options. The criteria in the **Other Filters** section is cleared.

Job Statistics Dialog

The **Job Statistics** dialog displays by right-clicking in the **Job Activity** pane and selecting **Statistics** from the context menu. The **Job Statistics** dialog shows statistics regarding job occurrences for the day currently displayed in the **Job Activity** pane. You can view statistics for All Jobs, Production jobs and Unscheduled jobs on the respective tab.

All Jobs, Production and Unscheduled Tabs

These tabs contain the following elements:

- **Completed Normally** – Shows the number of jobs that completed normally.
- **Completed Abnormally** – Shows the number of jobs that completed abnormally.
- **Launch Errors** – Shows the number of jobs that have a status of **Error Occurred**.

- **Total Reruns** – Shows the number of jobs that have been rerun manually.
- **Number of Filtered Jobs** – Shows the number of jobs that have been filtered into the **Job Activity** pane using the job filter.

Job Activity Pane Procedures

Adding or Removing Columns in the Job Activity Pane

To add or remove columns:

Step 1 From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2 Select **View>Preferences** from the main menu bar or right-click the **Navigator** pane and select **Preferences** from the context menu to display the **Preferences** dialog.

Step 3 Click the **Columns** tab. By default, all columns are used.

- To remove columns, clear the check box to the left of the column name.
- To include columns, click the check box so that a black checkmark appears.

Adding a New Job or Group Occurrence to the Schedule

To add a new job or group occurrence:

Step 1 From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2 Right-click the job or job group occurrence to add to the production schedule and select **Insert Job Into Schedule** from the context menu or click the job or job group, and from the **Activities** main menu, select **Insert Job Into Schedule**.

Step 3 Click **Yes** at the confirmation prompt.

Another occurrence of the selected job or job group is added to today's production schedule regardless of its calendar dates (if any). If the job is defined to repeat, only one occurrence of the job enters the schedule. Note that a job must have the **Unscheduled Allowed** option selected in its **Job Definition** to be added in this manner.

Adjusting Column Widths in the Job Activity Pane

To adjust a column's width:

Step 1 Place the cursor on the right vertical border of the column heading. The mouse pointer turns into the separator icon.

Step 2   Hold down the left mouse button and resize the width.

Deleting Jobs or Groups from the Production Schedule

To remove jobs that have not yet launched from the production schedule:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   Right-click the job or job group occurrence to remove, and from the context menu select **Remove Job(s) from Schedule**. In the resulting confirmation dialog, select **Yes** if you only want to delete the selected job occurrence. If you wish to delete all future scheduled occurrences of the job, select the **All** option.

You can select multiple jobs or job groups simultaneously.

- To select more than one job or job group that are adjacent to each other, hold down the Shift key and select the first and last jobs.
- To select more than one job or job group that are not adjacent to each other, hold down the Control key while selecting the desired job occurrences.

Step 3   Click **Yes** at the confirmation prompt.

Remove Job(s) from Schedule will remove any pre-launch job occurrence from the schedule, for any date. Only the job occurrence you select is removed. If a job group occurrence is selected, all of the group's child jobs are removed.

Filtering Jobs in the Job Activity Pane Based on Job Status

To filter a job:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   Click the **Filter** button on the TES toolbar or right-click the Navigator pane and select **Filter** from the context menu to display the **Job Filter** dialog.

The statuses that are presently displayed are the ones with a check mark.

Step 3   Select the agent, owner and job statuses to view.

Moving to Different Dates and Times in the Job Activity Pane

You can view job occurrences for past, present or future days. Each job's retention history value in its job definition determines how far back you can see its job occurrences. The **Future Days** value in the **System Configuration** dialog determines how far you can see into the future.

> **Note**   When you are viewing the current day in the Job Activity pane, you may also see jobs from previous dates if those jobs have not yet completed.

To move to different dates and times:

From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

- To move backward one day in the production schedule, right-click in the **Job Activity** pane and select **Prior Day** from the context menu.

- To move forward one day in the production schedule, right-click in the **Job Activity** pane and select **Next Day** from the context menu.

- To move to today's date and time, right-click the **Job Activity** pane and select **Goto Now** from the context menu.

- To move to a job's graphical start location, right-click the job's record and select **Goto Job Time** from the context menu to display the job's start time.

Pausing the Production Schedule

You can pause and then resume the production schedule at any time. You can also pause and resume job launching without having any affect on scheduling.

When you pause a production schedule, the master service is stopped and waiting jobs are prevented from running, even if their dependencies are met. Jobs that are already in **Active** status will continue to run on their respective agents; however, their updated status (for example, **Completed Normally**) will not be displayed in the **Job Activity** pane until the master service is restarted.

When you pause job launching, jobs can still be scheduled and calendars compiled, but jobs will not actually launch until job launching is resumed.

To pause the production schedule or job launching:

Step 1   From the **Navigator** pane, select **Operations>Job Activity>** to display the **Job Activity** pane.

Step 2   From the **Activities** main menu, select **Pause Scheduler** or **Pause Job Launching**.

Rearranging Columns in the Job Activity Pane

To rearrange columns:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   From the **View** main menu, select **Preferences** or right-click the **Navigator** pane and select **Preferences** from the context menu to display the **Preferences** dialog.

Step 3   Click the **Columns** tab.

Step 4   Select the column and click the up or down arrows to arrange the titles into the desired order.

Recreating the Production Schedule

To recreate the production schedule:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   From the **Activities** menu, select **Create Schedule** to display the **Create Schedule** dialog.

Step 3   Select the date range for which to create the schedule.

Step 4   If you want repeating jobs with no time window to start immediately, rather than after midnight, select the **For today's repeating jobs with no time window, start repeating ASAP** option.

Step 5   TES searches for all qualified jobs to add to the production schedule for the selected dates.

⚠

Warning   **All job occurrences that were added manually and all records of jobs that ran will be lost. Furthermore, the Create Schedule recreates the schedule at the time you issue the command. This means that jobs whose dependencies have not been met can qualify to run immediately. Use this command with caution.**

Refreshing the Job Activity Pane

To refresh:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   From the **View** main menu, select **Refresh Data** or **Refresh All Data**.

Resuming the Production Schedule or Job Launching

To resume the production schedule or job launching:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   From the **Activities** main menu, select **Resume Scheduler** or **Resume Job Launching**.

Saving a Job's Output on the Master

You can view the output of a job after the job finishes running. In order to view the output of a job from the **Job Activity** pane, you must save the output for the job on the master (this is the default).

To save a job's output on the master:

Step 1   From the **Navigator** pane, select **Definitions>Jobs** to display the **Jobs** pane.

Step 2   Select the job for which to save output.

Step 3   Click the **Edit** button to display the **Job Definition** dialog.

Step 4   Click the **Options** tab.

Step 5   In the **Save Output** option, select **Append** or **Replace**.

Step 6   Click **OK**. The next time the job completes, you can view its output from the **Job Detail** dialog.

Selecting or Removing All Job Filters in the Job Activity Pane

To select or remove all job filters:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   Click the **Filter** button on the TES toolbar or right-click the Navigator pane and select **Filter** from the context menu to display the **Job Filter** dialog.

Step 3   Right-click in the **Statuses** section and select **Check All** or **Uncheck All** from the context menu.

Setting the Completion Status of a Job

Note   You should only set the completion status of jobs that have already finished running. Setting completion status of a job that is still active, may adversely affect job activity.

To set the completion status:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   Select the job on which to perform job control.

Step 3   Right-click the job to open the **Job Activity** context menu.

Step 4   From the **Job Control** submenu, select **Set** and from the **Set** submenu, select the desired job completion status.

Note   When job completion statuses are changed in this way, an asterisk appears to the right of it, for example, Completed Normally*.

Sorting Jobs in the Job Activity Pane Using Column Headers

You can sort the job occurrences displayed in the **Job Activity** pane by two different sorting criteria. You can sort on a primary criteria and in turn, organize the primary sort by secondary criteria. The sorts are done by column header in either alphabetical or numerical order depending on the type of data contained in the column.

To sort a job using a column header:

Step 1 From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2 Click the column header to select it for a primary sort. The jobs sort alphabetically (in text data) or numerically (if numerical data). A single arrow displays beside the column header to denote the primary sort.

If you click the header more than once, the sort order toggles back and forth from ascending to descending order.

Step 3 To perform a secondary sort, hold down the **ALT** key while clicking the column header. The secondary sort displays a double arrow in the column header.

For example, click the **Name** column heading. The items in the column are alphabetized from a to z (because the column contains alphabetical data). Clicking again reverses the order z to a. Click the **Time** column header while holding down the **ALT** key and the jobs remain in alphabetical order but are now organized also by numerical order (since this column contains numerical data). Now the jobs are arranged in alphabetical order and each numerical segment is organized from earliest time to latest time. Clicking again on the secondary sort column while holding down the **ALT** key reverses the secondary sort to latest time to earliest time.

If you click the header more than once, the sort order toggles back and forth from ascending to descending order.

Sorting Jobs Using the Job Filter Dialog

To sort jobs using the Job Filter dialog:

Step 1 From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2 Click the **Filter** button on the TES toolbar or right-click the **Navigator** pane and select **Filter** from the context menu to display the **Job Filter** dialog.

Step 3 Checking or clearing the options for status or hours enables you to sort jobs using those criteria. You can also sort using other criteria listed including by job name, by agent, by queue, by command, etc.

> **Note** The Job Filter dialog includes filter options that affect sorting. For example, if you want to sort by the status column, and some statuses have been filtered out, those statuses will not be used for sorting.

> **Note** When a Status column is clicked for sorting within the Job Activity pane, the order is defined by the settings on the Job Status Order tab in the System Configuration dialog.

Stopping or Starting Jobs in the Job Activity Pane

To stop or start a job:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   Select the job on which to perform job control.

Step 3   Right-click the job to display the **Job Activity** context menu.

Step 4   From the **Job Control** submenu, select one of the following job control options:

- Select **Override** to override a job's dependencies. The job enters a queue and becomes active. **Override** ignores all dependencies and launches the job immediately.

- Select **Hold/Stop** to stop a job from running or to keep a job from launching. The job enters the **Held** or **Stopped** status. If the job cannot be held or stopped, you cannot select this menu item.

> **Note**   Windows jobs cannot be suspended, therefore this menu item is unavailable for active Windows jobs.

- Select **Release/Resume** to release a held job, or a job waiting for operator release or to start a stopped job. The job enters the **Active** or **Waiting On Dependencies** status. If the job can't be released or resumed, you won't be able to select this menu item.

- Select **Cancel/Abort** to cancel a job before running or to abort a job while running (**Canceled** jobs cannot be rerun). The job enters the **Canceled** or **Aborted** status. If the job can't be canceled or aborted, you won't be able to select this menu item.

- Select **Cancel/Abort All** to cancel all occurrences of a job before running or to abort all occurrences of a job while running. All occurrences of the same job enter the **Canceled** or **Aborted** status.

- Select **Rerun** to rerun a job. The job re-enters the schedule and is re-executed with the same job ID number. A new occurrence ID is not created. If the job can't be rerun, you won't be able to select this menu item.

Viewing a Job's Output

You can view the output of a job after the job finishes running. In order to view the output of a job from the **Job Activity** pane, you must first have the **Save Output** option selected in the job's or job group's definition.

> **Note**   Scheduler's default is to discard job output.

To view a job's output:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   Double-click the completed job to display the **Job Detail** dialog.

Step 3   Click the **Output** tab to view job output.

Viewing Other Dates in the Production Schedule

To view other dates:

Step 1   From the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

Step 2   Click the **Select Day** button or right-click in the **Job Activity** pane and select the **Select Day** option to display a **Calendar** tab.

Step 3   Click the date to go to. You can use the arrow controls in the title bar to move to different months.