



Monitoring Production

TES includes a reporting mechanism that supports numerous reports, such as:

- Data displayed in every window
- Operator alerts and responses
- Job statuses
- Event history
- Dependency cross-references
- Production schedule summary

Reports Pane

TES reports let you print out information that exists in the TES database. A report can be generated from the information displayed in any **Scheduler** pane by clicking the **Print** button that is placed in each button bar. (In some windows, you must select a sub-category in the window to display the button bar.) Clicking the **Print** button displays a preview of the report. You can print the report by clicking the **Print** button in the preview toolbar.

There are also specialized reports available from the **Reports** main menu. The four reports available are **Job Last Status**, **Schedule Summary**, **Dependency Cross Reference** and **Event History**.



Note

For reports to display and print properly, your machine must have a default printer configured. It is recommended that reports be printed in the landscape configuration.

Reports Interface

TES supports numerous reports, such as:

- Data displayed in every window
- Operator alerts and responses
- Job statuses
- Event history
- Dependency cross-references
- Production schedule summary

From the **Reports** main menu on the TES Web client, select the type of report that you want to see or print.

The four reports available from the **Reports** main menu are **Job Last Status**, **Schedule Summary**, **Dependency Cross Reference** and **Event History**.

You can reach the **Reports** interface for other types of TES reports by clicking the **Print** button while in those areas.

Buttons

- **First Page** —Displays the first tab of the report.
- **Prior Page** —Displays the previous tab of the report.
- **Next Page** —Displays the next tab of the report.
- **Last Page** —Displays the last tab of the report.
- **Print** —Prints the report using the current print settings.
- **Zoom to fit** —Fits an entire report tab onto the screen. If you change the window size, the contents resize to show a complete tab.
- **Save Report** —Saves the report to a text file.
- **Open Report** —Allows you to open a previously saved report.
- **Help** —Accesses the online help system for relevant context information.



Note

You can also use the tab **UP**, **TAB DOWN**, **HOME** and **END** keys on your keyboard to navigate any **Reports** window: Tab Up = next tab, tab Down = previous tab, Home = first tab, End = last tab.

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.

Columns

The set of columns displayed in a **Reports** window depends on the specific report that is being previewed.

Reports Window Context Menu

When you right-click in any **Reports** preview window, the **Reports** window context menu displays.

The **Reports** window context menu contains the following element:

- **First Page** —Displays the first tab of the report. This option has the same function as the **First Page** button.

- **Next Page** —Displays the next tab in the report. This option has the same function as the **Next Page** button.
- **Previous Page** —Displays the previous tab in the report. This option has the same function as the **Previous Page** button.
- **Last Page** —Displays the last tab of the report. This option has the same function as the **Last Page** button.
- **Zoom** —Fits an entire report tab onto the screen. This option has the same function as the **Zoom to fit** button. If you change the window size, the contents resize to show a complete tab.
- **Print** —Prints the report using the current print settings. This option has the same function as the **Print** button.
- **Save** —Saves the report to a text file. This option has the same function as the **Save** button.
- **Open** —Loads a previously saved report. This option has the same function as the **Open** button.

Main Menu Reports

Job Last Status Report

The **Job Last Status** report shows a snapshot of the status of all the latest occurrences of jobs in the production schedule and reveals actual start times vs. estimated start times.

Table 11-1 *Column Meaning in Job Last Status Report*

| Column Name | Description |
|------------------|--|
| Job No | The job occurrence number. |
| Job Name/Command | The name of the job as defined in the job's definition and the executable file specified in the Command Name field. |
| Parent | The parent job group (if any) to which the job belongs. |
| Status | The last status of the job at the time the report was generated. If the job has not yet run, this field will be blank. |
| Time | The actual date and time the job started. |
| Prod. Date | The production date for which the job was originally scheduled. |
| Est. Time | The estimated job start date and time based on the job's dependencies and time window. |

Schedule Summary Report

This report provides a general understanding of job throughput in the production schedule. It reveals the number of successful jobs vs. failed jobs and shows all the current statuses. If you report on multiple days, daily job totals and an overall sum total are given.

Table 11-2 *Column Meaning in Schedule Summary Report*

| Column Name | Description |
|------------------|--|
| Date | Displays the date of the schedule covered by the summary report. |
| Scheduled | Displays the number of jobs and job groups that were scheduled using a calendar. |
| Inserted | Displays the number of jobs that were manually added to the schedule. |
| Failed | Displays the number of jobs that failed (statuses of Error Occurred and Completed Abnormally). |
| Timed Out | Displays the number of jobs that didn't run within their time window. |
| Reruns | Displays the number of jobs that were rerun by an Operator (through the job control menu Rerun option). |
| Current Statuses | Lists all the current statuses in the production schedule. |

Dependency Cross Reference Report

This report provides information about dependencies on jobs that are in the production schedule.

Table 11-3 *Column Meaning in Dependency Cross Reference Report*

| Column Name | Description |
|---------------------|--|
| Job Name | Displays the root job for which to show dependencies. |
| Direct Dependents | Displays all the dependencies that are last in line to be completed before all other dependencies are met. |
| Indirect Dependents | Displays all the dependencies that must be completed before the direct dependents can complete. |

Direct dependents are jobs that are directly dependent on the job defined by job name. Indirect dependents are all other jobs in the dependency chain that are affected by the direct dependents.

For example, if **Job A, Job B, J C, J D** were the dependency chain, and **Job A** was listed, **Job B** would be the direct dependent, and **Job C** and **Job D** would be the indirect dependents.

Event History Report

This report displays information about the events that occurred in the time interval specified in the **Event History Selection** dialog. Optionally, you can include in the report details about the action that was triggered by the event.

Table 11-4 Column Meaning in Event History Report

| Column Name | Description |
|---|---|
| Trigger Time | Displays the time that the event was triggered. |
| Event Name | Displays the name of the event that was triggered. |
| Trigger | Displays the condition that triggered the event action that was taken in response to the event. |
| Status | The current status of the event. |
| The fields below are displayed only if the Include Action Detail option is selected. | |
| Action Time | Displays the status of the action. |
| Action Name | The name of the action that was triggered by the event. |
| Action Type | Displays the type of action that was taken. |
| Action Status | Displays the status of the action. |

Event History Selection Dialog

The **Event History Selection** dialog displays by selecting **Event History** from the **Reports** main menu. In this dialog, you select the criteria to be used as the report is compiled.

This dialog contains the following elements:

- **All Days** —Includes each day of available event history in the **Event History** report.
- **Date Range** —Specifies a range of dates and a starting time and ending time. To compile a report on a specific time window, specify the same date in the **From** and **Until** fields and enter the starting and ending times of the time window.
- **All Types** —Includes all types of events in the **Event History** report.
- **By Type** —Specifies a single type of event to exclude the other event types from the **Event History** report.
- **Include Action Detail** —Includes details about the action that the event triggered in the **Event History** report.

Report Range Dialog

The **Report Range** dialog displays by selecting **Schedule Summary** from the **Reports** main menu.

The **Report Date Range** dialog is used to select the dates that are used for the report. The default date is today (the current day). You can either type dates directly in the fields or click the down-arrow button to select a date from the graphical calendar. No information displays for dates that extend beyond your job history (past or future).

Individual Pane Reports

Most pane reports will not print reports on individual items listed in the pane. These reports require a minimum of two items or more in the report. If you select just one item before selecting the **Print** button, the entire contents of the pane are included in the report. The only panes that allow a report on a single item are the **Job Activity**, **Jobs** and **Calendars** panes.

You can select multiple items in a window that are adjacent to each other by holding down the **SHIFT** key and clicking the first and last items in a desired range of items.

You can select multiple items in a window that are non-adjacent to each other by holding down the **CTRL** key and clicking the desired item.

Actions Report

The **Actions Report** preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in any **Actions** pane.

The **Actions** report contains the following columns:

Table 11-5 *Column Meaning in Actions Report*

| Column Name | Description |
|--------------------|--|
| Owner | Displays the owner of the action. |
| Action Name | Displays the name of the action. |
| Public | Indicates if the action is available to other users. |
| Action Description | Displays any description that is entered on the Description tab of the action's dialog. |
| Modified | Displays the date and time that the action was modified. |

Agent Lists Report

The **Agent Lists** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Agent Lists** pane.

The **Agent Lists** report contains the following columns:

Table 11-6 *Column Meaning in Agent Lists Report*

| Column Name | Description |
|----------------------|--|
| List Name/Agent Name | Displays the name of the agent list with the names of the agents. |
| List Type | Displays the type of agent list. Agent lists can be Ordered , Random , Balanced , Broadcast or Rotation . |
| Modified | Displays the date and time that the agent list was modified. |

Alerts/Response Report

The **Alerts/Response** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu within the **Alerts** pane.

The **Alerts/Response** report contains the following columns:

Table 11-7 Column Meaning in Alerts/Response Report

| Column Name | Description |
|---------------|--|
| Time | Displays the time the alert was issued. |
| Status | The last status of the job at the time the report was generated. |
| Job No | The job occurrence number. |
| Job Name | The name of the job as defined in the job's definition. |
| Alert Message | The message the operator receives when viewing the alert. |
| Response | The response entered by the operator. |

Calendars Report

The **Calendars** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu within the **Calendars** pane.

The **Calendars** report contains the following columns:

Table 11-8 Column Meaning in Calendars Report

| Column Name | Description |
|------------------|---|
| Name | Displays the names of the calendar. |
| Type | Displays the type of calendar. |
| Public | Indicates if the calendar is Public; that is, available to all TES users. |
| Modified | Displays the date and time that the calendar was modified. |
| Rules/Conditions | Displays any rules or conditions applied to the calendar. |

Connections Report

The **Connections** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu, from the **Connections** pane.

The **Connections** report contains the following columns:

Table 11-9 Column Meaning in Connections Report

| Column Name | Description |
|------------------|---|
| Name | Displays the name of the machine displayed in TES panes and dialogs. This is not necessarily the same name the machine uses on the network. |
| Type | Displays the TES component type. This column can show either master, agent, adapter, backup master, or fault monitor. |
| Operating System | Displays the operating system used by the component. |
| Active | Displays whether the connection is active and available to be used. |
| Limit | Displays the job limit for an agent or adapter connection. |

Table 11-9 *Column Meaning in Connections Report*

| Column Name | Description |
|--------------|---|
| Machine Name | Displays the machine name as recognized by the network. |
| Ports | Displays the port number(s) the component uses to communicate with the master. The master row contains the port number that Tidal Web clients use to communicate with it. |

Event Activity Report

The **Event Activity** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu, from the **Event Activity** pane.

The **Event Activity** report contains the following columns:

Table 11-10 *Column Meaning in Event Activity Report*

| Column Name | Description |
|-------------|--|
| Name | Displays the name of the event. |
| Type | Displays the type of event. |
| Count | Displays how many times the event occurred. |
| Modified | Displays the last time that the event definition was modified. |
| Trigger | Displays the event trigger that initiates the job event. |
| Status | Displays the current status of the event. |
| Agent | Displays the name of the connection being watched by the monitor. Job and system events do not monitor a connection so this column is blank for those event types. |
| Owner | Displays the user that owns the event. |

Fiscal Calendars Report

The **Fiscal Calendars** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu, from the **Fiscal Calendars** pane.

The **Fiscal Calendars** report contains the following columns:

Table 11-11 *Column Meaning in Fiscal Calendars Report*

| Column Name | Description |
|-------------------|---|
| Name | Displays the name of the event. |
| Starting Month | Displays the month that the fiscal calendar begins in. |
| Starting Day | Displays the first day of the starting month of the fiscal calendar. |
| Quarter Breakdown | Displays the number of weeks in each month of a quarter in the fiscal year. |

Schedules Report

The **Schedules** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Schedules** pane.

The **Schedules** report contains the following columns:

Table 11-12 *Column Meaning in Connections Report*

| Column Name | Description |
|----------------|--|
| Date | Displays the date of the production schedule. |
| Compile Start | Displays the date and time when the schedule compile began. |
| Compile End | Displays the date and time when the schedule compile finished. |
| Duration | The overall length of time of the compile. |
| Scheduled Jobs | The number of scheduled jobs. |
| Adhoc Jobs | The number of unscheduled jobs. |
| Reruns | The number of jobs that were rerun jobs (not original instances). |
| Carry-Over | The number of jobs that were carried forward from a previous schedule. |

Job Activity Report

The **Job Activity** report displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Job Activity** pane.



Note

There are four job activity reports that are not available from the Print button. These reports are the **Job Last Status**, **Schedule Summary**, **Dependency Cross Reference** and **Event History** reports. For information about the **Job Last Status**, **Schedule Summary**, **Dependency Cross Reference** and **Event History** reports, see [Main Menu Reports](#), page 11-363.

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

Table 11-13 *Column Meaning in Job Activity Report*

| Column Name | Description |
|-------------------|--|
| Job No | Displays the job instance identification number. |
| Job Name | Displays the name of the job or job group as defined in the job's or job group's definition. |
| Status | Displays the present status of the job. |
| Parameter | Displays the associated parameter. |
| Start Time | Displays the time the job is (or became) active. |
| Duration | Displays the estimated or actual runtime duration. |
| Agent | Displays the name of the agent on which the job runs. |
| Queue | Displays the queue from which the job runs. |
| Runtime Use/Owner | Displays the runtime user and/or owner the job or job group runs as. |

Job Classes Report

The **Job Classes** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Job Classes** pane.

The **Job Classes** report contains the following columns:

Table 11-14 *Column Meaning in Job Classes Report*

| Column Name | Description |
|----------------|---|
| Job Class Name | Displays the name of the job class. |
| Description | Displays the description of the job class (optional), as specified in its definition. |
| Modified | Displays the date and time that the job class was modified. |

Job Events Report

The **Job Events** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Job Events** pane.

The **Job Events** report contains the following columns:

Table 11-15 *Column Meaning in Job Events Report*

| Column Name | Description |
|---------------|---|
| Owner | Displays the owner of the job event. |
| Event Name | Displays the name of the job event. |
| Event Trigger | Displays the event trigger associated with the job event. |
| Enabled | Indicates if a job event is enabled and available to use. |
| Modified | Displays the date and time that a job event was modified. |

Jobs Report

The **Jobs** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Jobs** pane when a job or job group is selected.

The **Jobs** report contains the following columns:

Table 11-16 *Column Meaning in Job Report*

| Column Name | Description |
|-------------|---|
| Job Name | Displays the name of the selected job or job group. |
| Parent | Displays the name of the parent job group for the selected job or job group. |
| Enabled | Displays whether the job is active or inactive. The job must be enabled before it can run. It has nothing to do with the status of the job or job group in the production schedule. |
| Job Class | Displays the job class that this job or job group belongs to. |

Table 11-16 Column Meaning in Job Report

| Column Name | Description |
|-------------------|--|
| Command | Displays the command and its parameters that is associated with the job. Commands cannot be associated to job groups |
| Environment File | Displays the environment file that is associated with the job. Environment files cannot be associated to job groups. |
| Working Directory | Displays the pathname for the working directory for the program or script specified in the Command field. |
| Calendar | Displays the calendar name that is associated to the job or job group. |
| Time Window | Displays the time window in which the job or job group can run, as specified in the job or job group definition. |
| Repeat | Displays the number of times the job or job group repeats. |
| Agent Name | Displays the name of the agent on which the job runs. |
| Runtime User | Displays the runtime user name that is used to run the job. |
| Description | Displays the description of the job or job group. This is the user-defined description that exists on the Description(s) tab. |

System Logs Report

The **System Log** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Logs** pane.

The **System Logs** report contains the following columns:

Table 11-17 Column Meaning in Job Report

| Column Name | Description |
|-------------|--|
| Log ID | Displays the Log ID number for the log message. This number is always unique. |
| Time | Displays the date and time the log message was generated. |
| | (Continued) |
| Message | Displays the text of the log message. |
| Sender | Displays the system component that was the source of the log message, e.g., master, agent, Tidal Web client, Job Manager, etc. |
| Job Name | Displays the name of the job that generated the message. This field is blank for user edits. |
| Job ID | Displays the unique ID number of the job (if any) that generated the log message. |
| User | Displays the user name of the job that generated the log message. User names appear on audit messages relating to login/logout of users and any edits made by users. |
| Agent | Displays the name of the agent if the log message originated from an agent. |

Queues Report

The **Queues** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Queue** pane.

The **Queues** report contains the following columns:

Table 11-18 Column Meaning in Queues Report

| Column Name | Description |
|-----------------|--|
| Queue Name | Displays the name of the queue. |
| Active | Displays whether the queue is active or disabled. |
| Limit | Displays the number of jobs that can run from the queue at one time. |
| Priority | Displays the priority value assigned to the queue with respect to other queues in the system. |
| Bumping | Displays whether jobs can migrate from this queue to other higher priority queues if jobs are not being launched after a certain period of time. |
| Hours Available | Displays the hours of operation assigned to the queue. |
| Modified | Displays the date and time that the queue was modified. |

Security Policies Report

The **Security Policy** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Security Policies** pane.

The **Security Policies** report contains the following columns:

Table 11-19 Column Meaning in Security Policies Report

| Column Name | Description |
|-----------------|--|
| Security Policy | Displays the name of the security policy. |
| Modified | Displays the date and time that the security policy was modified. |
| Category | Displays the function categories that are included in the security policy. |
| Functions | Displays the functions that are included in each selected category. |

System Events Report

The **System Events** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu, in the **System Events** pane.

The **System Events** report contains the following columns:

Table 11-20 Column Meaning in System Events Report

| Column Name | Description |
|---------------|--|
| Owner | Displays the owner of the system event. |
| Event Name | Displays the name of the system event. |
| Event Trigger | Displays the event trigger associated with the system event. |

Table 11-20 Column Meaning in System Events Report

| Column Name | Description |
|-------------|--|
| Enabled | Displays whether the system event is enabled for use. |
| Modified | Displays the date and time that the system event was modified. |

Users Report

The **Users** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Users** pane.

The **Users** report contains the following columns:

Table 11-21 Column Meaning in Users Report

| Column Name | Description |
|-----------------|--|
| User | Displays the login name of the TES user. This is the name TES uses to validate a user. When specifying a runtime user, it is this user name that is referred to. |
| Full Name | Displays the name specified as the user's full name in their user definition. |
| Security Policy | Displays the user's assigned security policy name. |
| (Continued) | |
| Email | Displays the user's email address. |
| Phone | Displays the user's phone number. |

Variables Report

The **Variables** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Variables** pane.

The **Variables** report contains the following columns:

Table 11-22 Column Meaning in Users Report

| Column Name | Description |
|----------------|--|
| Owner | Displays the owner of the variable. Owners can be users or workgroups. |
| Variable Name | Displays the name of the variable including its id number. |
| Type | Displays the type of variable (string, number or date). |
| Variable Value | Displays the current value of the variable. |
| Modified | Displays the date and time that the variable was changed. |

Workgroups Report

The **Workgroups** report preview window displays by clicking the **Print** button or by right-clicking and selecting **Print** from the context menu in the **Workgroups** pane.

The **Workgroups** report contains the following columns:

Table 11-23 *Column Meaning in Workgroups Report*

| Column Name | Description |
|-------------|--|
| Workgroup | Displays the name of the workgroup. |
| Users | Displays a list of users belonging to the workgroup. |

Logs Pane

You can use the **Logs** pane to view and print a history of **Error**, **Audit**, **Warning** and **Diagnostic** messages that were generated by TES. These messages are part of normal TES operations but diagnostic messages are logged only when troubleshooting.

If there are a lot of logging messages, it may take a long time to load them when this window is selected. If there are more than 10,000 messages in the **Logs** pane, a dialog with the following message displays when the window displays: **There are <number> log messages for the current production day. It is recommended that you enable Server Side Filtering and redefine your selection criteria. Would you like to display the Log Filter dialog now?**

It is recommended that you select the **Yes** option and filter the log messages from the Server Side to download and display only the messages that you are interested in. If you do not use the Server Side filter with the log messages, all of the log messages are downloaded and it may take a long time to display these messages. For more information on filtering the logs, refer to the [Log Filter Dialog, page 11-379](#).

With each message, TES includes a message source to help you determine where the error occurred.

The possible sources are:

- Clients
- Masters
- Agent Manager
- Fault Tolerance
- Dependency Manager
- Job Manager
- Action Manager
- Queue Manager
- Users
- Fault Tolerance
- Client Manager
- Compiler
- Database
- Communication

Error Messages

Error messages all concern a failure or abnormal operation of some kind. Origins include agent problems, fault tolerance components, and actions that were not executed. An **Error** message gives you information that helps you determine where to look to resolve the error. By default, error messages appear in red text but this color can be modified in the **Preferences** dialog.

Audit Messages

Audit messages generally relate routine details of TES operations. Operating system errors are the exception, and are included under TES audit messages. By default, **Audit** messages appear in green text but this color can be modified in the **Preferences** dialog.

Audit messages fall into the following categories:

- **Master** —Records all accounts of when the master started and stopped.
- **Purging** —Records all accounts of when job occurrences and audit messages are purged from the database.
- **Production Schedule** —Records all accounts of when jobs change status, and of when the production schedule is recreated.
- **User Actions** —Records when TES items are added or edited, such as jobs, job groups, job events, job actions, etc. Impersonate User activities are also logged.
- **Operator Actions** —Records job control performed on job occurrences in the production schedule.
- **Fault Tolerance** —Records activities of the fault tolerance mechanism when installed.

Audit messages include:

- Master status
- Purging of old jobs from the production schedule
- Purging of audit, error, and diagnostic messages
- Production date turnover
- Job occurrence status change
- Add, edit and delete actions from different TES panes
- Job control performed by a user or through an action
- Normal fault tolerance activities
- System error messages

Warning Messages

Warning messages are generated by conditions that can lead to potential problems. They are precautionary alerts to a user to investigate a condition before it becomes a problem. Warning messages always appear in the log in gray text because their color cannot be configured.

Diagnostic Messages

Diagnostic messages are used for internal debugging purposes as a tool for better analysis of product code. Diagnostics for the various system components that comprise TES are configured from the **Logging** tab of the **System Configuration** dialog. The level of diagnostic logging detail can be configured for each individual component. While the default diagnostic setting is **Severe**, the settings range from **None** to **High Debug**. The higher settings should only be used under the supervision of Tidal's Support personnel. The amount of information collected on the higher settings can consume large volumes of disk space on your machine.

The default location for diagnostic logs on a Windows master machine is **C:\Program Files\Tidal\Scheduler\master\logs**.

The default location for diagnostic logs on a Unix master machine is: **opt/Tidal/master/logs**.

Selecting the **Client Diagnostics** option on the **Logging** tab will collect diagnostic information on the connection socket between the master and the Tidal Web client.

**Note**

Other information about the Tidal Web client is collected from the **Poll Activity** pane in the **Master Status** pane. Right-clicking in this pane and selecting the **Client Debug** option enables Tidal Web client diagnostic logging that gathers information into a file in the **Master** directory called *sadiags.txt*. Refer to <Jumps>“Troubleshooting” on page 407 for more information.

Logs Pane Interface

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

You can change the sort order of the display by clicking the head of the column that you want to use as a sort key.

Buttons

- **Filter** —Displays the **Logs Filter** dialog to customize the data that displays in the **Logs** pane.
- **Prior Day** —Displays the log records for the day before the one currently displayed.
- **Select Day** —Displays the log records for today or any other day.
- **Next Day** —Displays the log records for the day after the one currently displayed.
- **Print** —Displays the **Reports** window to view and print the contents of the **Logs** pane. For more information, see [System Logs Report, page 11-371](#).

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.

Columns

- **Log ID** —The identification number of the message. This identification number is unique to each message. Any log ID with a minus sign refer to log entries from a backup master. The minus sign helps identify log entries that occurred during a failover.
- **Time** —The date and time the message was logged.
- **Type** —The type of log message (**Error**, **Audit** or **Warning**).
- **Message** —The text of the log message.
- **Source** —The source of the message.
- **Job Name** —The name of the originating job.
- **Job No.** —The unique job ID number.
- **User Name** —The name of the originating user.
- **Agent** —The name of the originating agent.
- **Msg ID** —The message number that corresponds to the message text (also corresponding with the **Message** drop-down list log filter). You can search for all messages based on the message number.
- **Computer** —The computer from which the log message originated.
- **Job Alias** —The unique code that identifies a job or job group.

Logs Preferences Dialog

If you select **Preferences** from the **View** main menu while viewing the **Logs** pane, the **Logs Preferences** dialog displays.

Columns Tab

From the **Columns** tab () of the **Logs Preferences** dialog, you can select which columns are displayed in the **Logs** pane and in what order they appear.

- A checkmark to the left of a column title indicates that it will be displayed in the window. 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.

General Tab

From the drop-down menu in the **Error Messages** and **Audit Messages** fields, you can select a color to represent each of these log message.

Navigator Context Menu

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

The **Logs Navigator** context menu contains the following options:

- **Filter** —Displays the **Log Filter** dialog. Has the same function as the **Filter** button on the toolbar. You can filter the job occurrences that are displayed in the **Jobs** pane according to criteria you select. You can also custom-sort log records. For more information about the **Log Filter** dialog, see [Log Filter Dialog, page 11-379](#).
- **Prior Day** —Displays the logs for the day before the one currently displayed. This option has the same function as the **Prior Day** button on the toolbar.
- **Next Day** —Displays the logs for the day after the one currently displayed. This option has the same function as the **Next Day** button on the toolbar.
- **Select Day** —Displays a calendar to select the date whose logs you want to view. This option has the same function as the **Select Day** button on the toolbar.
- **Preferences** —Displays the **Preferences** dialog for the **Logs** pane.
- **Print** —Displays the **Reports** window to view and print your log records. This option has the same function as the **Print** button on the toolbar. For more information about the **Reports** window, see [Reports Interface, page 11-361](#).
- **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.

Logs Pane Context Menu

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

The **Logs** pane context menu contains the following options:

- **Details** Displays the details of a selected log message.
- **Filter** —Displays the **Log Filter** dialog to filter the job occurrences that are displayed in the **Jobs** pane according to criteria you select. This option has the same function as the **Filter** button on the toolbar. For more information about the **Log Filter** dialog, see [Log Filter Dialog, page 11-379](#)) You can also custom-sort log records.
- **Prior Day** —Displays the logs for the day before the one currently displayed. This option has the same function as the **Prior Day** button on the toolbar.
- **Next Day** —Displays the logs for the day after the one currently displayed. This option has the same function as the **Next Day** button on the toolbar.
- **Select Day** —Displays a calendar to select the date whose logs you want to view. This option has the same function as the **Select Day** button on the toolbar.
- **Print** —Displays the **Reports** window to view and print your log records. This option has the same function as the **Print** button on the toolbar. For more information about the **Reports** window, see [Reports Interface, page 11-361](#).

- **Auto Update** —Sets the **Logs** pane display to refresh automatically.

Log Filter Dialog

To open the **Log Filter** dialog, click the **Log Filter** button on the TES toolbar from the **Logs** pane, or select **Filter** from the **Logs** pane context menu. The settings in this dialog are the parameters for which log messages are displayed in the **Logs** pane.



Note

All times within the logs are adjusted relative to the master's time zone.

This dialog contains the following elements:

- **Source** —The source of the message. Leaving this field empty includes messages from all sources.
- **Agent** —From the drop-down menu, you can select a specific agent whose messages you want to see. Making no selection in this field includes all agents' messages.
- **Job Name** —You can select or manually type the name of any job whose messages you want to see. Leaving this field empty includes messages from all jobs.
- To search for a job, click the **Browse** button, to open the **Job Search** dialog.
- **Errors** —Selecting this option includes TES error messages in the **Logs** pane (according to the other filters specified). Error messages note failures or abnormal TES operations.
- **Audits** —Selecting this option includes TES audit messages in the **Logs** pane (according to the other filters specified). Audit messages primarily track normal status changes and actions that affect TES operations though operating system errors are also noted.
- **Warnings** —Selecting this option includes TES warning messages in the **Logs** pane (according to the other filters specified). Warning messages are precautionary alerts to potential problems.
- **Hours** —Displays messages that occurred only during the hours selected. The default is to have all hours selected.
- **Current day** —Messages from today only.
- **Date Range... From ... To ...** —Select a specific period of days to see log messages. You can type directly into these fields using the date format specified in your Windows Regional Settings Control Panel or click the **Browse** button to select dates from a graphical calendar.
- **Computer** —The name of the computer where the message originated.
- **User** —The user who owns the event that generated the message.
- **Message Text** —Type text here if you want to see only logs containing certain text strings. Leaving this field blank displays all messages.
- **Last** —Select this option to start filtering from the most recent entry in the log.
- **Minutes** —Specify how far back in time within the current log to filter. Clicking the arrows changes the minutes in increments of 60.
- **Server Side Filter** —This option can improve performance by reducing network traffic. Select this option if the log filter criteria does not change very often. With this option selected, only logs meeting the defined criteria are downloaded to the Tidal Web client when the **Logs** pane is selected. Once the filter criteria is changed, logs are filtered again according to the new criteria and downloaded again.

If the option is not selected, all logs 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 logs from the Tidal Web client since they do not have to be downloaded again.

- **Defaults** —Resets the criteria to both **Errors** and **Audits** types and all hours.

Log Details Dialog

To open the **Log Details** dialog, double-click any individual record in the **Logs** pane.

Scheduler Error Messages

The following table lists the TES errors that may appear in log messages

Table 11-24 Error Message Descriptions

| Column Name | Log # | Description |
|--|-------|--|
| Job %%1 terminated on signal. | 2101 | The job on the agent was aborted by the TES system or terminated in some other manner. |
| Problem with spool file for job %%1. | 2102 | There was a problem with the job script or the environment file for the given job: The job's script file does not exist or cannot be read. The job data string sent by the master was corrupt. There was an error transferring the job script from the master to the agent. There was an error transferring the environment file from the master to the agent. |
| Effective user was not found on agent for job %%1. | 2103 | The effective or runtime user (the user for whom the job runs) does not exist on the agent. |
| Job name was not provided for job %%1. | 2104 | The system attempted to launch a job that had no name. |
| Could not set group id for job %%1. | 2105 | The agent could not set the group id of the process executing the job to that of the runtime user. |
| Could not set user id for job %%1. | 2106 | The agent could not set the user id of the process executing the job to that of the runtime user. |
| Could not change to home directory for job %%1. | 2107 | The agent could not change directories to the product directory on the agent. |
| Could not execute user script for job %%1. | 2108 | The agent could not execute the script for the job. |
| Was not able to fork child process for job %%1. | 2109 | The agent was not able to create a process to run the user's script. |

Table 11-24 Error Message Descriptions

| Column Name | Log # | Description |
|---|-------|---|
| Job %%1 is already running on agent. | 2110 | The named job is already running on the agent. |
| Pipe to output command failed for job %%1. | 2111 | The agent failed to run the output command for the job. |
| SAP failure launching job %%1. | 2112 | The SAP job failed to launch. |
| Failure launching PeopleSoft job %%1. | 2113 | The PeopleSoft job failed to launch. |
| Status Update query failed for job %%1. | 2150 | The job status could not be updated. |
| Launch failure for job %%1 [%%2]. | 2151 | The job could not be launched. |
| Failed to send mail regarding %%1 to %%2 for alert (Error %%3). | 2160 | There was an error in the mail system that prevented mail from being sent. |
| Failed to make SNMP connection to send message: %%1. | 2170 | There was an error in the SNMP system that prevented the SNMP connection from being made. |
| Failed to send SNMP message: %%1 | 2171 | There was an error in the SNMP system that prevented the SNMP message from being sent. |
| Primary master lost connection to FaultMon. | 2200 | This error occurs when the fault monitor machine or connection fails. |
| Primary master lost connection to backup. | 2201 | This error occurs when the backup master machine or connection fails. |
| Primary master lost connections to FaultMon and backup master, shutting down. | 2202 | The backup master and fault monitor machine or connection fail at the same time. |
| FaultMon not responding. | 2203 | Fault monitor connection is up, but fault monitor does not respond to polls. This is an intermediate error message that precedes Primary master lost connection to FaultMon. |
| Backup master not responding. | 2204 | Fault monitor connection is up, but backup master does not respond to polls. This is a temporary error message and precedes Primary master lost connection to backup. |
| Backup master lost connection to FaultMon. | 2205 | This error occurs when the backup master machine loses connection to the fault monitor. There is no fault tolerance until this problem is corrected. |
| FaultMon lost connection to backup master. | 2206 | This error occurs when the Fault Monitor machine loses connection to the backup master. There is no fault tolerance until this problem is corrected. |
| Backup master is taking over all master functions. | 2207 | Primary master is down. The backup master is taking over. |

Table 11-24 Error Message Descriptions

| Column Name | Log # | Description |
|---|-------|--|
| Incomplete configuration for fault tolerance. | 2208 | There is incomplete information about the primary backup or faultmon components in the database. |
| Unable to start backup master because fault tolerance is disabled | 2209 | Fault tolerance is not in operation so the backup master could not be started. |

Audit Messages

The following table lists TES **Audit** messages:

Table 11-25 Audit Messages

| Message | Log # | Description |
|---|-------|--|
| Master Audit Messages | | |
| Master starting. | 1001 | A record of when the Master attempted to start. |
| Master started. | 1002 | A record of when the Master completed its initialization. |
| Master shutdown. | 1003 | A record of when the Master was shut down. You cannot run a job on a Master that has been shut down. |
| Purging Audit Messages | | |
| Purged jobs older than their retention date. | 1004 | TES purged occurrences of jobs that are older than the retention specified in the job's definition. |
| Purged audit messages from logs older than %%1. | 1005 | TES purged audit messages according to the audit log message retention setting in the System Configuration dialog. |
| Purged error messages from logs older than %%1. | 1006 | TES purged error messages according to the error log message retention setting in the System Configuration dialog. |
| Production Schedule Audit Messages | | |
| New production date %%1. | 1008 | A create schedule was performed on this date and time, recreating job occurrence in the production schedule. |
| Job %%1[%%2] status change to %%3. | 1100 | The specified job occurrence has changed its status. This audit message occurs for all jobs in the production schedule. |
| Sent request to insert job %%1. | 1215 | Records when a job was added to the schedule for a particular date only. The job may or may not have an associated calendar. |
| Production Schedule Audit Messages | | |

Table 11-25 Audit Messages

| Message | Log # | Description |
|--|-------|---|
| Sent request to replace job %%1 in schedule. | 1217 | Records when a job scheduled to run at a future time is replaced by an updated version of the job. |
| Added %%1 %%2. | 1201 | This audit is generated whenever a user adds a job, job group, job action, job event, security policy, user, variable, workgroup, queue, agent list, or job class. |
| Modified %%1 %%2 %%3. | 1202 | This audit is generated whenever a user modifies a job, job group, job action, job event, security policy, user, variable, workgroup, queue, agent list, or job class. |
| Deleted %%1 %%2. | 1203 | This audit is generated whenever a user deletes a calendar, job, job group, job action, job event, security policy, user, variable, workgroup, queue, agent list, or job class. |
| User %%1 impersonated user %%2 | 1218 | Records when a user impersonates another user. Both users are shown. |
| User %%1 stopped impersonating user %%2 | 1219 | Records when a user stopped impersonating another user. Both users are shown. |
| User Action Audit Messages | | |
| Sent request to override job %%1. | 1204 | Records when the operator manually performed job control to override the job's dependencies. |
| Sent request to cancel job %%1. | 1205 | Records when the operator cancelled the job while it was waiting to run. |
| Sent request to set job status for %%1 to %%2. | 1206 | Records when the operator changed the completion status of the job. |
| Sent request to stop job %%1. | 1207 | Records when the operator stopped a job while it was running in the production schedule. |
| Sent request to hold job %%1. | 1208 | Records when the operator put a job on hold, preventing it from running when its dependencies are met. |
| Sent request to rerun job %%1. | 1209 | Records when the operator reran the job. |
| Sent request to abort job %%1. | 1210 | Records when the operator aborted the job while it was running. |
| Sent request to release job %%1. | 1211 | Records when the operator released the job that was specifically waiting on the operator to release it before launch. |
| User Action Audit Messages | | |
| Sent request to restart job %%1. | 1212 | Records when the operator restarted the stopped job. |

Table 11-25 Audit Messages

| Message | Log # | Description |
|---|-------|---|
| Run data for job %%1 has been modified. | 1213 | Records when the run data for the job has been modified from the production schedule. The modified data is not reflected in the job's definition. |
| Fault Tolerance Audit Messages | | |
| Primary Master connected to FaultMon | 1250 | Records when the Primary Master connects to the Fault Monitor during startup. This message indicates normal operation. |
| Primary master connected to backup | 1251 | Records when the Primary Master connects to the backup master during startup. This message indicates normal operation |

TES Diagnostic Messages

Diagnostic messages are intended for Technical Services troubleshooting purposes only.

Schedules Pane

The **Schedules** pane displays a record of TES production statistics. The **Schedules** pane uses a matrix format rather than a graphical approach to provide much the same information as the **Master Status** pane provides in the **General Information** pane.

Each time a production schedule is compiled, TES adds a log entry to the **Schedules** pane. Each record includes the date, beginning and end times of the compile and totals for different types of jobs.

There are two types of schedules, **Scheduled** and **Forecast**. The scheduled type are actual compiled schedules ready to run. The forecast type is more of a prototype of a production schedule and is used as a beta model of a proposed production day. The forecast schedule is recompiled into an actual production schedule when it is time to run.

Double-clicking any schedule listed in the **Schedules** pane displays the selected schedule in the **Job Activity** pane.

Schedules Pane Interface

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

You can change the sort order of the display by clicking the head of the column that you want to use as a sort key.

Buttons

Print —Displays the **Reports** window to view and print the contents of the **Schedules** pane. For more information about the **Schedules** pane report, see [Schedules Report, page 11-369](#).

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 <Jumps>“Searchable Columns” on page 35.

Columns

- **Date** —The date of the compile.
- **Compile Start** —When the compile began.
- **Compile End** —When the compile finished.
- **Duration** —The overall length of time of the compile.
- **Sched Jobs** —The number of scheduled jobs.
- **Adhoc Jobs** —The number of unscheduled jobs.
- **Reruns** —The number of jobs that were rerun jobs (not original instances).
- **Carry-Over** —The number of jobs that were carried forward from a previous schedule.
- **Compile Type** —The compile type of schedule. If a *scheduled* compile, the schedule will run as soon as the production day starts. If a *forecast* compile, the schedule is recompiled at the start of the production day before the schedule runs.

Schedules Preferences Dialog

If you select **Preferences** from the **View** main menu while viewing the **Schedules** pane, the **Schedules Preferences** dialog displays.

From the **Schedules Preferences** dialog, you can select which columns are displayed in the **Schedules** console window and in what order they appear.

- A checkmark to the left of a column title indicates that it will be displayed in the window. 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.

Navigator Context Menu

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

The **Schedules Navigator** pane context menu contains the following options:

- **Refresh** —Updates the data in the current pane.
- **Print** —Displays the **Reports** window to view and print your schedules records. This option has the same function as the **Print** button on the toolbar.

- **Create Schedule** —Recompiles the selected schedule. If the current day's schedule is selected, then a warning displays requesting confirmation that you want to completely replace today's schedule. If you replace today's schedule, then any repeating jobs in today's schedule without a time window will begin repeating as soon as possible. More control over creating schedules is available from the **Create Schedule** dialog accessed from the **Activities** main menu.
- **Export** —Saves the data in the current pane as an ASCII text file. You can then use the file data in other applications.
- **Preferences** —Displays the **Preferences** dialog for the **Schedules** pane.
- **New Root Folder** —Allows you to create a new root folder for the **Navigator** pane.

Schedules Pane Context Menu

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

The **Schedules** pane context menu contains the following options:

- **Edit Schedules** — Allows you to edit the selected schedule.
- **Refresh** —Updates the data in the current pane.
- **Print** —Displays the **Reports** window to view and print your schedules records. This option has the same function as the **Print** button on the toolbar.
- **Print Selected** —Displays the **Reports** window to view and print the selected schedules records. This option has the same function as the **Print** button on the toolbar.
- **Create Schedule** —Recompiles the selected schedule. If the current day's schedule is selected, then a warning displays requesting confirmation that you want to completely replace today's schedule. If you replace today's schedule, then any repeating jobs in today's schedule without a time window will begin repeating as soon as possible. More control over creating schedules is available from the **Create Schedule** dialog accessed from the **Activities** main menu.
- **Accept Schedule** —When you first create a schedule it is a projected schedule and is only tentative. Selecting the **Accept Schedule** option confirms the projected schedule should become the actual schedule.
- **Revert to Forecast** —Changes a schedule to tentative.
- **Remove Schedule** —Deletes the selected schedule.

Master Status Pane

The **Master Status** pane displays TES production activity and statistics. It is divided into tabs, with each tab displaying a different area of activity. The Master Status display is automatically updated every 60 seconds. The master version number displays at the top of the **Master Status** pane.

Master Status Pane

From the **Navigator** pane, select **Operations>Master Status** to display the **Master Status** pane.

General Information Pane

The **General Information** pane shows important production data. Listed are the total number of jobs scheduled to run and also breakdowns into different categories.

This pane contains the following elements:

- **Start Time** —When the master was brought online.
- **Last Poll** —The last time this Tidal Web client polled the master for information.
- **Production Date** —The current date of production. Note that this date may differ from the current date (today) depending on the settings on the **System Configuration** dialog, **Master** tab. For more information about the **System Configuration** dialog, see <Jumps>“Getting Started” on page 29.
- **Scheduled Jobs** —The number of jobs that are scheduled to run.
- **Adhoc Jobs** —The number of jobs inserted into the schedule manually.
- **Jobs Carried Forward** —The number of jobs carried forward from the previous day.
- **Carry Forwards to Go** —The number of jobs carried forward from the previous day that have not run yet.
- **Reruns** —The number of rerun jobs. This value does not include the original instance of a job, or jobs with new instance numbers.
- **Total Jobs** —The total number of jobs to be run.
- **Jobs Done** —The total number of jobs that have completed.
- **Jobs To Go** —The number of jobs that are waiting and still eligible to run.
- **Jobs Cancelled** —The number of jobs that have been cancelled.

Columns

- **Description** —The statistic to be counted.
- **Value** —The value for the statistic.

Poll Activity Pane

The TES master continually polls Tidal Web clients to determine if jobs are ready to launch, to check job status, to process Tidal Web client requests, etc. The **Poll Activity** pane gives you a real-time view of polling activity within the last two or three minutes. You can scroll through the list of poll activity.

Columns

- **Time** —The time of activity.
- **Activity** —The master activity.

Poll Activity Pane Context Menu

This context menu displays when you right-click in the **Poll Activity** pane.

This context menu contains the following options:

- **Refresh** —Updates the data in the **Poll Activity** pane.

- **Print** —Prints the status data in the **Poll Activity** pane.
- **Print Selected** —Prints the status of the selected data in the **Poll Activity** pane.

Within the **Polling Activity** pane, various four-letter command codes are used to indicate master activity.

Table 11-26 Error Message Descriptions

| Poll Code | Description |
|-----------|---|
| AG88 | An OpenView client connected to the master. |
| DCHG | Generic data changed. |
| DNOD | The master deleted the node. |
| DSTA | The job dependency status was checked. |
| IMST | Intermaster dependency status was checked. |
| JADD | A new job definition was added. |
| JCAN | The job was cancelled. |
| JCNA | All selected job instances were cancelled. |
| JDEL | The job was deleted. |
| JHLD | The job was placed in HOLD status. |
| JINA | The job is inactive. |
| JINS | An ad-hoc job was inserted into schedule. |
| JOVD | The job's dependencies were overridden. |
| JOVR | The job was overridden. |
| JREL | The job was released. |
| JREM | The job instance was removed. |
| JRMA | All job instances within specified date range were removed. |
| JRRN | The job was rerun. |
| JRRS | The job step was rerun. |
| JREL | The job was released. |
| JRPL | The job rule was changed-replaced job instance. |
| JSET | The job status was set manually. |
| LICN | The license was checked. |
| PING | The master was pinged. |
| QZRO | The queue limit was set to zero (used with alerts). |
| RAGT | The master reconnected to the node. |
| RCON | The configuration status of the agent was refreshed. |
| REQD | The agent requested data. |
| REST | The agent requested estimate times. |
| RJBR | The agent refreshed job run. |

(Continued)

Table 11-26 Error Message Descriptions

| Poll Code | Description |
|-----------|---|
| RLST | The master's agent list was refreshed after the agent list is modified. |
| RNOD | The master refreshed the node. |
| RQCL | The master shut down the system queue. |
| RQOP | The master opened the system queue. |
| RQUE | The master refreshed the system queue. |
| RVAR | The master refreshed the variables. |
| RVCA | The master refreshed the cache. |
| RVUP | The master updated the variables. |
| SCMP | The master compiled the schedule. |
| SNDC | The master sends the Tidal Web client a message. |
| SPAU | The master stopped the production schedule. |
| SRES | The master resumed the production schedule. |
| SRFR | The master was refreshed. |
| STOP | The master was stopped. |
| TRMC | The master terminated the Tidal Web client connection. |
| UNOD | The master updated the node. |

Queue Activity Pane

The **Queue Activity** pane lists each TES queue and the queue's limits, and shows how many jobs are currently active in the queue as well as how many jobs are waiting to run in it.

Columns

- **Name** —The name of the queue.
- **Priority** —The queue priority order.
- **Limit** —The maximum number of jobs the queue is allowed to accept.
- **Active** —How many jobs in queue are active.
- **Waiting** —How many jobs in the queue are waiting to run.
- **Enabled** —Whether the queue is available. If the current time is outside of the hours of operation specified in the **Hours** field of the **Queue Definition** dialog, the queue displays **No**.
- **Modified** —Last modified date.

Connected Users Pane

The **Connected Users** pane shows which users are currently running a Tidal Web client connected to the master.

Columns

- **User** —Displays the user name and domain of origin.
- **Connected** —Displays the time the user started working with TES.
- **Client Version** —Displays the version number of the connected Tidal Web client.
- **Computer** —Displays the name of the Tidal Web client machine.

Connected Users Pane Context Menu

Select a connection within the **Connected Users** pane and right-click to display a context menu.

This context menu contains the following options:

- **Send Message** —Opens a text field to send a message to the specified Tidal Web client/user.
- **Broadcast Message** —If an agent connection is not selected, this option opens a field that will broadcast the message to all connected Tidal Web clients.
- **Terminate Session** —Terminates the selected Tidal Web client connection.

Unavailable Connections Pane

The **Unavailable Connections** pane displays which connections are currently unavailable for use, if any.

Columns

- **Connection** —The name of the connection.
- **Type** —The type of connection that is unavailable.
- **Port(s)** —The port(s) the connection uses.

Messages Pane

The **Messages** pane displays contains a log of the last 200 messages shown in the digital display.

Columns

The **Messages** pane contains the following columns:

- **From** —The sender of the message.
- **Time** —The time when the message was received.
- **Text** —The text of the message.
- **Untitled field** —The text of the message.

Messages Pane Context Menu

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

The **Messages** pane context menu contains the following options:

- **Send Message** —Sends a message to a Tidal Web client.
- **Broadcast Message** —Broadcasts a message to all Tidal Web clients.

Send Message to Client Dialog

From the **Messages** tab on the **Master Status** pane, double-click a message to send a new message to a Tidal Web client or to broadcast a message.

-or-

Right-click a message and select **Send Message** or **Broadcast Message** from the context menu.

The **Send Message to Client** dialog displays.

Type your message and click **Send**. Your message displays in the **Messages** tab.

