

Feature	Description
@ version 6.5.1	
Client Manager Architecture changes:	<p>In the 6.5.1 release, the TESCachE Database has been removed from the Client Manager. The Client Manager now syncs the information from the Master database into its own in-memory database that it then uses to provide all TA Web Client users with current information.</p> <p>For information about changes made to the Client Manager installation and upgrade process, refer to:</p> <ul style="list-style-type: none"> <li>• Tidal Workload Automation Installation Guide – see Installing the Client Manager and Upgrading the Client Managers to 6.5.1 sections.</li> </ul>
Business Views Preview	<p>Business Views in the Tidal Automation 6.5.1 release is a preview version. Business Views has been completely rewritten to present a cleaner, more responsive user interface. Additional enhancements will be included in subsequent releases of Tidal Automation.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>• • Tidal Workload Automation User Guide Release 6.5.1 – see the Business Views section.</li> </ul>

Feature	Description
Disaster Recovery Implementation	<p>Tidal Workload Automation Disaster Recovery enables the recovery and continuation of Tidal Automation jobs with minimal interruption.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>• Tidal Workload Automation Installation Guide Release 6.5.1 – see the Implementing Disaster Recovery section. Also see the Tidal Workload Automation User Guide, Release 6.5.1.</li> </ul>
The Web Client A New Look-and-Feel	<p>The Web Client Graphical User Interface (GUI) is enhanced for an improved user experience.</p>
Disaster Recovery	<p>To assist with expeditious disaster recovery, a license that registers both primary and secondary hostnames is available. Virtual hostnames can be registered in the license, rather than registering the actual hostname on which the Master will run.</p>
Compatibility Updates	<p>Release 6.5.1 features support for the following:</p> <ul style="list-style-type: none"> <li>• OpenJDK 8 on Red Hat Enterprise Linux for all TA components</li> <li>• Oracle database enabled for multitenancy</li> <li>• Oracle 18c database</li> <li>• PeopleSoft 8.56 with Oracle 18c database</li> <li>• Cognos 11.1.1</li> <li>• Cognos 11.1.2</li> <li>• Windows 2012 Datacenter for TWA Windows agent</li> <li>• Amazon Linux 2 for all TWA components</li> </ul>

Feature	Description
	<p>For more information, refer to the Tidal Workload Automation Compatibility Matrix.</p> <ul style="list-style-type: none"> <li>• SQL Server Failover</li> <li>• ClusterOracle RAC and Dataguard Configuration</li> </ul> <p>For more information, refer to the Tidal Workload Automation Installation Guide Release 6.5.1.</p>
<p>Support for Installing Windows Master and Unix Master using Silent Installer</p>	<p>Silent installer support for Windows and Unix Masters has been added in this release using InstallVariables.properties.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>• Tidal Workload Automation Installation Guide Release 6.5.1 – see Installing the Windows Master in Silent Mode and Installing the Unix Master in Silent Mode sections.</li> </ul>
<p>Support for Informatica to Use Active Directory MS-SQL Database</p>	<p>This release includes added support for the Informatica adapter to connect to an Informatica server with an Active Directory database account.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>• Tidal Workload Automation Informatica Guide Release 6.5.1 – see the Adding Connection for Informatica Server with Active Directory Database Account.</li> </ul>

Feature	Description
<p>Support for Specifying Agent Time Zone</p>	<p>Prior to this release, jobs defined to run in the Agent Time Zone had dependency on the time zone set on system time on the machine used to run an Agent. In this release, the Agent/Schedule Time Zone can be specified when creating an agent connection. As a result, the Master can accurately calculate time differences between Master and Agent in different time zones without relying on the system time.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>• Tidal Workload Automation User Guide, Release 6.5.1 – see the Managing Agent Time Zone section.</li> </ul>
<p>Support to Retain Created Date of a User</p>	<p>A new field appears in the usrmst table to retain the date when a user is created. For more information, refer to the User Table in the Scheduler Data Model 6.5.1.</p>
<p>Support for Distribution Lists in the PeopleSoft Adapter</p>	<p>Support for specifying distribution lists in the PeopleSoft Adapter. For more information, refer to:</p> <ul style="list-style-type: none"> <li>• Tidal Workload Automation PeopleSoft Adapter Guide 6.5.1.</li> </ul>

Feature	Description
<p>Support to Transform Output of PS Query to XFORM</p>	<p>Support for specifying the output format of PeopleSoft Query as XFORM. For more information, refer to:</p> <ul style="list-style-type: none"> <li>• Tidal Workload Automation PeopleSoft Adapter Guide 6.5.1.</li> </ul>
<p>Enhanced License Support</p>	<p>To assist with expeditious disaster recovery, a license that registers both primary and secondary hostnames is available. Virtual hostnames can be registered in the license, rather than registering the actual hostname on which the Master will run.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>• Tidal Workload Automation Installation Guide Release 6.5.1 – see the Licensing Disaster Recovery and Applying a Permanent License sections.</li> </ul>

Feature	Description
Security Enhancements	Resolved security issues like Cross Site Scripting, Cross-Site Request Forgery, XXE Attack and SQL Injections.
Pending Enhancements	<ul style="list-style-type: none"> <li>• New enhanced UI and Business Views in webclient</li> <li>• Support for additional primitive Soap Data Types in Webservice Adapter</li> <li>• TWA to certify Oracle 12c database enabled for Multi Tenancy Repository Service</li> </ul>
@version 6.5.2	
Business Views	<p>Business Views has been completely rewritten to present a cleaner, more responsive user interface. Additional enhancements will be included in subsequent releases of Tidal Automation.</p> <p>For more information, refer to:  <b>■ Tidal Automation User Guide Release 6.5.2</b> – see the <i>Business Views</i> section.</p>

Feature	Description
@version 6.5.3	
Online Archiving	<p>Tidal Automation now supports Online Archiving of log message, enabling a longer retention of log message in the Admiral database and obviating the need to purge the log messages frequently.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>■ <b>Tidal Automation User Guide Release 6.5.3</b></li> </ul>
Client Manager Seamless Upgrade	<p>Starting with Tidal Automation release 6.5.3, the Client Manager Installer allows you to upgrade the Client Manager from any 6.5.x to 6.5.3.</p> <ul style="list-style-type: none"> <li>- For more information, refer to: <ul style="list-style-type: none"> <li>■ <b>Tidal Automation Installation Guide Release 6.5.3</b> – see the <i>Installing the Client Manager</i> section.</li> </ul> </li> </ul>
Expanded Support	<ul style="list-style-type: none"> <li>• — Red Hat Enterprise Linux 8</li> <li>• — OpenJDK 8 for Windows</li> <li>• — Oracle JDK 11 for both Windows and UNIX*</li> <li>• — OpenJDK 11 for both Windows and UNIX*</li> <li>• — Jetty upgraded to 9.4.20</li> </ul> <p>— Google Chrome</p>

Feature	Description
File Event Enhancement	Variables can be passed in the Target field of the File Event Definition dialog.



Feature	Description
Silent Installer Support	Silent installer support for Master, Backup Master, Fault Monitor, Java Client and Client Manager for Windows and Unix.

Feature	Description
Support for Configuring SSL on Client Manager through Installer	Configuring SSL on Client Manager for Windows and UNIX through installer has been added in this release. For more information, refer to: ■ <b>Tidal Automation Installation Guide Release 6.5.3</b> – see the <i>Installing the Client Manager</i> section.

Feature	Description
Support for SAP S/4 HANA ABAP Stack	<ul style="list-style-type: none"><li>- The SAP Adapter now supports SAP S/4 HANA ABAP stack. For more information, refer to:<ul style="list-style-type: none"><li>■ <b>Tidal Automation Compatibility Matrix</b></li></ul></li></ul>
Support for Google Cloud Platform	Tidal Automation is now fully qualified to run on Google Cloud Platform infrastructure.

Feature	Description
SAP Adapter Enhancements	<ol style="list-style-type: none"> <li>1. SAP Job class is displayed in the job run information.</li> <li>2. SAP Job output shows "Message class", "Message No." and "Message Type".</li> <li>3. Add, Edit, Delete options in the Parameters tab of the SAP Connection Definition dialog.</li> </ol> <p>For more information, refer to:  <b>■ Tidal Automation SAP Adapter Guide Release 6.5.3.</b></p>
Agent Time Zone with Scheduling Time Zone Jobs and Job Based Time Zone Jobs Enhancement	<ul style="list-style-type: none"> <li>- Calculating the job time (from time, estimated start time or until time) for Agent Time zone and job based Time zone happens when the jobs are compiled. This enhancement eliminates the re-compilation of jobs for re-calculation of the job time during a DST shift.</li> </ul>
WebService Adapter Enhancements	<ol style="list-style-type: none"> <li>1. Proxy can be set using the Connection Definition dialog.</li> <li>2. Request retry can be set now in the Options tab of the WebService Job Definition dialog.</li> <li>3. WebService Adapter now handles additional primitive SOAP Data Types as follows: <ul style="list-style-type: none"> <li>○ boolean</li> <li>○ byte</li> <li>○ unsignedByte</li> <li>○ unsignedShort</li> <li>○ unsignedLong</li> <li>○ unsignedInt</li> <li>○ nonNegativeInteger</li> <li>○ positiveInteger</li> <li>○ negativeInteger</li> <li>○ decimal</li> <li>○ float</li> <li>○ hexBinary</li> </ul> </li> </ol>

Feature	Description
	<ul style="list-style-type: none"> <li>○ duration</li> </ul> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>■ <b>Tidal Automation WebService Adapter Guide Release 6.5.3.</b></li> </ul>
<b>Note :</b>	<p>The legacy SOAP interface is deprecated with 6.5, and will be removed completely in June 2020.</p>
@Version 6.5.5	
<b>Job Factory</b>	<p>A job group can serve as a template, using which, jobrun instances can be created and inserted. Another job group can act as a factory, which can insert customized instances of the template group. These job instances can appear with a modified name in the job activity, so they can be easily identified.</p>

Feature	Description
<p>Compound Dependencies for the Job</p>	<p>While defining a job, apart from setting the job dependencies, you can now define Boolean expressions. Boolean expression can be defined using the index number of the dependency. For example, you can enter (1 &amp; 2) I (2 &amp; 3), i.e., the job should run if either dependencies 1 and 2 are met or if dependencies 2 and 3 are met.</p> <p>Note: You can also represent the Boolean expression in the form- (1 and 2) or (2 and 3). These expressions are supported in Tidal Automation.</p> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide</b></p>
<p>Custom Start Time</p>	<p>Beginning with the Tidal Automation Release 6.5.4, you can customize the starting time of jobs. This option can be set in the <b>Schedule</b> tab of the <b>Job Definition</b> dialog. Apart from setting hourly jobs, you can also set minutes to run a job. For example, you can specify a job to run at 10.00 hours, 13.00 hours and set minutes such as 15, 25. For example, using the values stated in the previous sentence, following timings could include: 10.15 hours (10:15 am), 10.25 hours (10:25 am), 13.15 hours (1:15 pm) and 13:25 hours (1:25 pm), respectively.</p> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide</b></p>

Feature	Description
<p>Enhancements to Business Views</p>	<ul style="list-style-type: none"> <li>■ Job Node borders have been trimmed.</li> <li>■ Information icon on the node have been removed.</li> <li>■ Non-job dependencies are added as icons inside the job node.</li> <li>■ Progress of the job(s) are displayed in the Job Activity screen.</li> </ul> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide</b></p>
<p>Extended Support for Microsoft Edge</p>	<p>Edge browser is compatible with Tidal Automation Release 6.5.4.</p>
<p>Timezone options in Insert Job into Schedule dialog</p>	<p>While inserting a job group or a child job associated with the group, the <b>Timezone</b> options (Master and Job-Based) are enabled in the <b>Insert Job Into Schedule</b> dialog box if the child job or the job group has been assigned with a specific time along with a timezone in the <b>Time Window</b> of the <b>Schedule</b> tab.</p> <p>When inserting a job group or child group associated with a group and the job group or child job has been assigned a specific time with a timezone in the <b>Time Window</b> field of the <b>Schedule</b> tab, then the Timezone options (Master and Job-Based) are automatically enabled in the <b>Insert Job into Schedule</b> dialog box.</p> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide</b></p>

Feature	Description
<p>Relative to Root Group in Job Activity option</p>	<p>When two jobs do not share the same direct parent group, but they are contained anywhere within the same hierarchy under a single root-level group, you can now define a dependency between the two where instance matching is done relative to the root group, rather than globally for the day.</p> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide</b></p>
<p>Tag Features</p>	<p>Tags are used to categorize or group various objects in the TA ecosystem. Tagging objects allows you to search for objects based on specific tags. Potential uses for tags include setting up visualization representations of object categories via object tags. In Tidal Automation Release 6.5.4, you can assign a tag to a job definition object. A job run instance is tagged by the job definition ID it relates to.</p> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide</b></p> <p>Tags do not support the following functionalities in this release:</p> <ol style="list-style-type: none"> <li>1. Java Client will not implement tag functionality. You cannot see the tag grid from the Java Client. You cannot assign tags to jobs from the Java Client.</li> <li>2. Tags are not stored in the Transporter for this release.</li> <li>3. Multiple job tagging is not available in this release. Tags can be assigned to a specific job definition object.</li> </ol> <p>The search for tags / filter in the Job pane works similarly to the rules for searching for a job by name (including wild card characters).</p>



Feature	Description
@Version 6.5.6	*****
SLA Enhancements	<p>This feature adds support for defining the System-wide SLA Policies and SLA Rules for jobs in the Web client.</p> <p>Managing SLAs provides a user with advanced monitoring and alerting of events. By dynamically utilizing resources to jobs based on SLA breaches, already-breached or missed SLA windows can be reprioritized.</p> <p>The Tidal Automation system enforces System-wide SLAs using SLA Policy definitions. In the TA system, System-wide SLA policies can be defined with one or more SLA Rules.</p> <p>TA users assigned with the required security policies can access an SLA policy.</p> <p>SLA Rules enforce the violations of SLA policies on a particular production day. An SLA Rule is identified by a Calendar / Time Window / Risk and Breach Windows. An SLA Rule can be tagged with one or more Business Activity tags to help identify and track the jobruns that have violated the SLAs.</p> <p>Note:</p> <ul style="list-style-type: none"> <li>□ System-wide SLA events will not be triggered if a Business Activity tag is updated using the Edit Business Activity Tags option from the Jobs Pane context menu. As a workaround, edit the job definition and update the Business Activity tags.</li> <li>□ When a disabled SLA Policy is enabled again, it is not shown in the SLA Activity pane. Modify one of its SLA rules for this SLA Policy to be shown in the SLA Activity pane.</li> </ul> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>□ Tidal Automation User Guide — Chapter 4 — Job Activity</li> <li>□ Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</li> </ul>

Feature	Description
	<p>□ Tidal Automation User Guide — Chapter 9 — Controlling Production</p> <p>□ Tidal Automation User Guide — Chapter 11 — SLA Activity</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Appendix A—System-wide SLA Events and Job SLA Events</li> </ul>
<p><b>Critical Path Enhancements</b></p>	<p>These enhancements help to track critical jobs and those jobs on the critical path of any downstream jobs.</p> <p>The TA 6.5.6 Critical Path Enhancements address issues in the 6.5.5 release in which jobs were shown back-to-back. If there was a job waiting for resources, it was not indicated in the Graphical View. In the 6.5.6 release, this gap is now tracked; jobs are now identified as being critical to associated jobs as is applicable.</p> <p>For more information, refer to:</p> <p>□ Tidal Automation User Guide — Chapter 4 — Job Activity</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</li> </ul>
<p><b>Queue Activity Enhancements</b></p>	<p>The Queue Activity pane shows a condensed view of job activity (waiting and active jobs) per active Queue (including the parent hierarchy) for a particular production day. All active queues in the TA system, including the queues not associated with jobruns, are shown in the Queue Activity pane. This feature is supported only in the Web client.</p> <p>For more information, refer to:</p> <p>Tidal Automation User Guide — Chapter 12 — Queue Activity</p>
<p><b>Group Resources</b></p>	<p>In earlier versions of the TA system, resources were only assigned to Jobs. This enhancement adds support for assigning resources at the Job Group level.</p> <p>For more information, refer to:</p>

Feature	Description
	<ul style="list-style-type: none"> <li>□ Tidal Automation User Guide — Chapter 4 — Job Activity</li> <li>□ Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</li> <li>• Tidal Automation User Guide — Chapter 9 — Controlling Production</li> </ul>
<b>Policy Management: Validation Policies</b>	<p>This enhancement adds support for defining validation policies for a work group. A validation policy is defined as a rule or a requirement to create certain objects within the TA system. This feature enhancement is supported for Jobs and Variables only in TA 6.5.6. A validation policy can be modified in the Web client, and is read-only in the Java client.</p> <p>For more information, refer to:</p> <p>Tidal Automation User Guide — Chapter 3 — Users</p>
<b>Limit Job Inserts</b>	<p>To prevent accidental mass insertion of jobs and/or job groups, use this feature to set a threshold count and a passphrase that the user must enter when inserting multiple jobs and/or job groups above this threshold count. To enable this safeguard, add the Sysval configuration for the threshold count and the passphrase.</p> <p>For more information, refer to:</p> <p>Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</p>
<b>Job Factory Enhancements: Compile Time Variable Evaluation</b>	<p>This enhancement supports two new compiler directives: EVAL and PREVAL. The EVAL(\$C(EVAL[])) directive supports evaluating any variable when the jobrun has been created at compile time, whereas the PREVAL(\$C(PREVAL[])) directive supports evaluating variables in the job definition at precompile time, before jobruns are created.</p> <p>For more information, refer to:</p> <p>Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</p>

Feature	Description
<p><b>Job Activity Enhancements</b></p>	<p>The following Job Activity (Jobrun) enhancements are included in the TA 6.5.6 release:</p> <ul style="list-style-type: none"> <li>□ A new "ChildJobControl" context menu option appears for Job Groups in the Job Activity pane. Use this option to release all child jobs waiting on an operator, revert all canceled jobs to scheduled, and rerun all child jobs with the statuses Completed Abnormally, Error Occurred, and Orphaned.</li> <li>□ The following options now appear in the Job Control submenu in the Job Activity pane: <ul style="list-style-type: none"> <li>— Revert to Scheduled — Reverts a canceled job.</li> <li>— Revert to Scheduled &gt; Revert group only to Scheduled — Reverts only a canceled job group.</li> <li>— Revert to Scheduled &gt; Revert group and children to Scheduled — Reverts a canceled job group and its children.</li> </ul> </li> </ul> <p>For more information, refer to:</p> <p>Tidal Automation User Guide — Chapter 4 — Job Activity</p>
<p><b>Job Variables Enhancements</b></p>	<p>A new option, Reruns, now appears in the Job Variables context menu. Use this option to know about the rerun counts for the current job, parent job, and dependent job.</p> <p>For more information, refer to:</p> <p>Tidal Automation User Guide — Chapter 13 — Variables</p>
<p><b>Tidal Tokens</b></p>	<p>There are two types of Tidal tokens:</p> <ul style="list-style-type: none"> <li>□ API tokens that enable client applications to communicate with Tidal products on behalf of designated users without exposing user credentials.</li> <li>□ Session tokens generated for each user session behave similarly to a web session ID, but are not meant to replace a web session ID. Instead,</li> </ul>

Feature	Description
	<p>session tokens should be used along with the web session ID. A session token can validate a user and the origin of the incoming request. These tokens can be used to prevent unauthorized access to existing web sessions.</p> <p>Note: API Token authentication is not integrated with existing Kerberos authentication. For more information, refer to:</p> <p>Tidal Automation REST API Reference Guide</p>
<p><b>Tidal Dashboard</b></p>	<p>This preview of the new Tidal Dashboard offers users a graphical-based solution displaying Job Activity and Queue Activity information in bar chart, pie chart, and summary count formats. Users can design customized dashboards using a variety of widgets from which to select. Once generated, these dashboards can be shared with others as desired.</p> <p>The Dashboard is accessible via URL (<a href="https://&lt;hostname:port&gt;/dashboard.html">https://&lt;hostname:port&gt;/dashboard.html</a>) or from the TA Navigator pane. For more information, refer to:</p> <p>Tidal Dashboard Preview</p>
<p><b>SAP Job Last Run Enhancement</b></p>	<p>Prior to 6.5.6, users could clone only specific jobruns. The SAP Job Last Run enhancement supports the "Link with Last Run" option which clones the last or the latest jobrun. The cloned job can be identified by and run as a job with an SAP job name instead of a TA job name.</p> <p>For more information, refer to:</p> <p>Tidal Automation Adapter for SAP Guide — Chapter 3 — Defining SAP Jobs</p>

Feature	Description
<p><b>Amazon S3 Adapter Enhancements</b></p>	<p>The following S3 Adapter enhancements are included in the TA 6.5.6 release:</p> <ul style="list-style-type: none"> <li>□ A new action type, “No Action”, has been added under the “Disposition” section of the Amazon S3 Event Definition Dialog. If this option is selected, the TA system will not perform any action on the selected bucket.</li> <li>□ When defining Amazon S3 events, users can now select the required key name prefix from the list of available source key name prefixes and destination key name prefixes.</li> </ul> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>• <a href="#">Tidal Automation Adapter for Amazon S3 Guide — Chapter 3 — Using the Amazon S3 Adapter</a></li> </ul>
<p><b>SAML Support on Azure ADFS Environment</b></p>	<p>This enhancement adds support for enabling SAML SSO on Azure using ADFS in addition to the existing On-premise SAML authentication.</p> <p>For more information, refer to:</p> <p><a href="#">Tidal Automation Installation Guide — Chapter 5 — Installing the Client Manager</a></p>
<p><b>Command Line Support for Changing Runtime User (RTU) Passwords</b></p>	<p>This enhancement provides the ability to use SaCmd (command line) to change RTU passwords for service users. For more information, refer to:</p> <p><a href="#">Tidal Automation Command Line Program Guide — Chapter 2 — Command Descriptions</a></p>
<p><b>API Query Grammar Enhancements</b></p>	<p>The following query conditions and group clauses are supported as part of the revised API grammar.</p> <p>Conditions:</p>

Feature	Description
	<p>□ NOT LIKE □ NOT IN</p> <p>□ NOT NULL</p> <p>Group Clauses:</p> <p>□ &lt;cond1&gt; AND &lt;cond2&gt; AND ...</p> <p>□ &lt;cond3&gt; OR &lt;cond4&gt; OR ...</p> <p>□ (&lt;cond1&gt; AND &lt;cond2&gt;) OR &lt;cond3&gt;</p> <p>□ (&lt;cond1&gt; OR &lt;cond2&gt;) AND (&lt;cond3&gt; OR &lt;cond4&gt;)</p> <p>For more information, refer to:</p> <p>Tidal Automation REST API Reference Guide — Chapter 2 — Using the TA REST API</p>
<p><b>Compatibility Updates</b></p>	<p>This section provides the list of compatibility items added in the TA 6.5.6 release. □ Support for Ubuntu 20.04</p> <p>□ Support for Windows 10 LTSC for Agents</p> <p>□ Support for AWS RDS SQL Server 2019 Database □ Support for AWS RDS SQL Server 2019 Adapter □ Support for ServiceNow Paris</p> <p>□ Support for AWS Multi-AZ Deployments</p> <ul style="list-style-type: none"> <li>• Support for Firefox 83.0</li> </ul>
<p><b>@version 6.5.7</b></p>	<p>*****</p>
<p><b>New Tidal Login Page</b></p>	<p>A new login page has been implemented for the TA Web client. Users must enter their username and password on the login page to gain access to the TA Web client. Users can still access the Web client using the existing HTTP Basic authentication mode, provided that this mode is enabled.</p> <p>For more information, refer to:</p>

Feature	Description
	<p><b>Tidal Automation User Guide — Chapter 2 — Getting Started</b></p>
<p><b>Support for Password Vault Integration</b></p>	<p>TA supports integration of a third-party password vault with the TA Master to store runtime user credentials. When the TA Master starts up, a request is made to the Password Vault for the runtime user credentials. These credentials are then cached in the TA Master's memory. When the TA Master establishes a connection with an Agent or Adapter, it will perform a lookup in the TA Master's memory. The TA Master cache is refreshed with the latest runtime user credentials from the Password Vault at specific configurable intervals. The default is every 5 minutes.</p> <p>If the Password Vault feature is enabled, the <b>Vault</b> tab is shown on the <b>System Configuration</b> dialog box in the TA Web client. By default, the Password Vault Configuration is in <i>Read Only</i> mode and does not allow any changes to runtime user credentials. In this case, the runtime user credentials can be imported from the Password Vault.</p> <p>Set <b>Mode</b> to <i>Write</i> in the Password Vault Configuration to allow any changes to runtime user credentials in TA. The modified credentials are sent to the Password Vault, which in turn, are synchronized back to cached credentials in the TA Master.</p> <p>The password vault feature has been implemented in both the Web client and Java client. For more information, refer to:</p> <ul style="list-style-type: none"> <li>■ <b>Tidal Automation User Guide — Chapter 2 — Getting Started</b></li> <li>■ <b>Tidal Automation Installation Guide — Chapter 14 — Basic TA Configuration</b></li> </ul>
<p><b>Graphical View Enhancements</b></p>	<p>The following enhancements are added for Graphical Views:</p> <ul style="list-style-type: none"> <li>• ■ The new <b>Toggle Direction</b> button can be used to change the direction of job nodes in the following graphical views: <b>PERT Diagram, Critical Path Diagram, and Double Tree Diagram.</b></li> <li>• ■ The following options are added to the context menu of job nodes in <b>PERT Diagram</b> and <b>Critical Path Diagram</b> views: <ul style="list-style-type: none"> <li>○ — <b>Remove From View</b> - Removes a node from the graphical view.</li> <li>○ — <b>Add Successors</b> - Adds succeeding nodes to the graphical view.</li> <li>○ — <b>Add Predecessors</b> - Adds preceding nodes to the graphical view.</li> <li>— <b>Add Job Group Children</b> - Adds child job nodes of a job group node to the graphical view. — <b>Show Blocking Predecessors</b> - Shows preceding job nodes that block the progress of current job node.</li> </ul> </li> <li>■ The <b>Remove From View</b> option is added to the context menu of job nodes in <b>Double Tree Diagram</b> and <b>Regrouping Diagram.</b></li> </ul> <p>For more information, refer to:</p>



Feature	Description
	<p><b>Tidal Automation User Guide — Chapter 8 — Business Views / Graphical Views</b></p>
<p><b>SLA Enhancements</b></p>	<p>The following SLA enhancements are added:</p> <ul style="list-style-type: none"> <li>• ■ System-wide SLA Events are triggered when a jobrun did not complete within the risk or breach time window of applicable SLA Rules. The history of these SLA events is shown in the new <b>SLA History</b> tab for SLA Polices, SLA Rules, SLA Activity, Job Definition, and Job Activity.</li> <li>• ■ A new <b>SLA History Retention (in days)</b> option is added to the <b>System Configuration &gt; Master</b> tab. This option specifies the number of days the SLA History is retained in the TA database following which expired data will be purged. The default setting is for 30 days.</li> </ul> <p>■ The following four SLA variables are added to the new <b>Variables &gt; SLA Variables</b> context menu:</p> <ul style="list-style-type: none"> <li>• — Policy Name</li> <li>• — Rule Name</li> <li>• — Owner</li> <li>• — Timezone</li> <li>• — Breach From Time</li> <li>• — Breach Until Time</li> <li>• — Risk From Time</li> <li>• — Risk Until Time</li> </ul> <p>■ The following variables are added to <b>Variables &gt; Job Variables</b> context menu:</p> <ul style="list-style-type: none"> <li>• — Critical</li> <li>• — SLA Risk From Time</li> <li>• — SLA Risk Until Time</li> <li>• — SLA Breach From Time</li> <li>• — SLA Breach Until Time</li> </ul> <p>■ The following variables are added to <b>Variables &gt; Jobrun Variables</b> context menu:</p> <ul style="list-style-type: none"> <li>• — Critical</li> <li>• — On Critical Path</li> <li>• — SLA Risk From Time</li> <li>• — SLA Risk Until Time</li> <li>• — SLA Breach From Time</li> <li>• — SLA Breach Until Time</li> </ul> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>■ <b>Tidal Automation User Guide — Chapter 2 — Getting Started</b></li> <li>■ <b>Tidal Automation User Guide — Chapter 4 — Job Activity</b></li> </ul>

Feature	Description
	<ul style="list-style-type: none"> <li>■ <b>Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</b></li> <li>■ <b>Tidal Automation User Guide — Chapter 9 — Controlling Production</b></li>   <li>■ <b>Tidal Automation User Guide — Chapter 11 — SLA Activity</b></li> <li>■ <b>Tidal Automation User Guide — Chapter 13 — Variables</b></li> <li>■ <b>Tidal Automation User Guide — Chapter 14 — Monitoring Production</b></li> </ul>
<p><b>Critical Path Enhancements</b></p>	<p>The following Critical Path enhancements are added:</p> <ul style="list-style-type: none"> <li>• ■ Two new job event triggers “Job is no longer on the critical path for another job” and “Job is on the critical path for another job” are added.</li> <li>• ■ Nodes of jobruns that are <ul style="list-style-type: none"> <li>○ — critical are marked with a red “Critical” label</li> <li>○ — on the critical path of any downstream jobs are marked with a red “On Critical Path” label</li> <li>○ — both critical and on the critical path of other jobs are marked with both “Critical” and “On Critical Path” labels This enhancement is supported in the following Graphical Views: <ul style="list-style-type: none"> <li>○ — PERT Diagram</li> <li>○ — Critical Path Diagram</li> <li>○ — Double Tree Diagram</li> <li>○ — Status Board</li> </ul> </li> </ul> </li> </ul> <p style="text-align: center;">For more information, refer to:</p> <ul style="list-style-type: none"> <li>■ <b>Tidal Automation User Guide — Chapter 7 — Events</b></li> <li>■ <b>Tidal Automation User Guide — Chapter 8 — Business Views / Graphical Views</b></li> </ul>
<p><b>Queue Activity Enhancements</b></p>	<p>A new <b>Sankey Diagram</b> has been added to <b>Queue Activity</b> pane to show the status of each queue and the number of active and waiting jobs within that queue or any "child" queues.</p> <p>In the Sankey Diagram:</p> <ul style="list-style-type: none"> <li>■ a green node indicates an active queue</li>   <li>■ a grey node indicates a disabled queue</li> <li>■ a red node indicates an unavailable queue</li> </ul> <p>The height or depth of the node and the link indicate the activity level on the queue, whereas a thicker node and the link indicate that more jobs are running within that queue or its child queues.</p>

Feature	Description
	<p>The data in the Sankey Diagram refreshes every time the jobrun data changes in the lower <b>Job Activity</b> pane.</p> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide — Chapter 12 — Queue Activity</b></p>
<p><b>Validation Policy Enhancements</b></p>	<p>In addition to Jobs and Variables, validation policies can now be defined for <b>Calendars</b> and <b>Virtual Resources</b> and added to a workgroup.</p> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide — Chapter 3 — Users</b></p>
<p><b>Job Dependency Enhancements</b></p>	<p>The following three new options are added to the Occurrence list in the Job Dependency Definition dialog box:</p> <ul style="list-style-type: none"> <li>• <b>■ All Occurrences</b> - If selected, all instances of a job are used to satisfy the dependency. For example, if Job B depends on Job A, and Job A has 5 instances, each instance of Job B depends on all 5 instances of Job A. If one instance of Job A is removed from the schedule, then each instance of Job B depends only on the 4 of the remaining instances of Job A. If there are no instances of Job A, then each instance of Job B would not depend on any instance of Job A</li> <li>• <b>■ All Prior Occurrences</b> - If selected, all instances of the job excluding the current instance are used to satisfy the dependency. For example, instance #5 of Job B would depend on instances 1-4 of Job A, instance #4 of Job B would depend on instances 1-3 of Job A, and so on. Instance #1 of Job B would not depend on any instance of Job A.</li> <li>• <b>■ All Prior and Match Occurrences</b> - If selected, all instances of the job including the current instance are used to satisfy the dependency. For example, instance #5 of Job B would depend on instances 1-5 of Job A, instance # 4 of Job B would depend on instances 1-4 of Job A, and so on. Instance #1 of Job B would depend on instance #1 of Job A.</li> </ul> <p>For more information, refer to:</p> <p><b>Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</b></p>

Feature	Description
<p><b>Dashboard Enhancements</b></p>	<p>The following enhancements are added for Tidal Dashboard:</p> <ul style="list-style-type: none"> <li>• ■ The following element types are added to the list of element types: <ul style="list-style-type: none"> <li>○ — Jobs Chart</li> <li>○ — Horizontal Bar Chart</li> </ul> </li> <li>• ■ <b>Add Live</b> checkbox, <b>Refresh Interval</b> drop-down list, and <b>Refresh Units</b> drop-down list are added to <b>Dashboard Element</b></li> </ul> <p><b>Definition</b> dialog box.</p> <ul style="list-style-type: none"> <li>• ■ Tidal Dashboard can be accessed both in <ul style="list-style-type: none"> <li>○ — <b>Standalone mode</b> (as a separate Web page)</li> <li>○ — <b>Embedded mode</b> (from within TA)</li> </ul> </li> <li>• ■ Ability to load Dashboard securely via SSL.</li> <li>• ■ Ability to select multiple Job statuses in the Dashboard Elements screen. For more information, refer to <b>Tidal Automation Dashboard User Guide</b>.</li> </ul>
<p><b>Client Manager Custom Authentication Method</b></p>	<p>Starting with the TA 6.5.7 release, the TA Web client is accessible using either HTTP Basic authentication or Client Manager custom authentication methods. The Client Manager custom authentication method allows a Client Manager API client program to post a base64-encoded username and password to a new authentication endpoint. This new authentication method can be used in the place of HTTP Basic authentication method. Optionally, the Client Manager custom authentication method allows a user's password to be transmitted in an encrypted form.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>■ <b>Tidal Automation Installation Guide — Chapter 5 — Installing the Client Manager</b></li> <li>■ <b>Tidal Automation REST API Reference Guide — Chapter 2 — Using the TA REST API</b></li> </ul>
<p><b>Authentication of Users from Nested LDAP Groups</b></p>	<p>This enhancement allows an LDAP user to be authenticated to TA provided that the user's LDAP group and its hierarchy (nested groups) are registered with TA.</p> <p>For more information, refer to:</p> <p><b>Tidal Automation Installation Guide — Chapter 5 — Installing the Client Manager</b></p>

Feature	Description
<p>Support for SSL-based Remote JMX Connection</p>	<p>This enhancement enables remote JMX on the TA Master and Client Manager through SSL for a secure connection to JConsole. For more information, refer to:  <b>Tidal Automation Installation Guide — Chapter 16 — Configuring SSL Messaging</b></p>
<p>Support for Resource Names in JobRun Audit Log Messages</p>	<p>Starting with TA 6.5.7, based on the flag set for the new Sysval configuration (194), audit log messages are either shown or not shown for Jobs waiting on resources. Resource names are shown in the messages to easily identify the resources the job is waiting on.</p> <p>For more information, refer to:  <b>Tidal Automation User Guide — Chapter 4 — Job Activity</b></p>
<p>REST API Method for LDAP Group Retrieval</p>	<p>A new method “getLDAPGroups” has been added to “Users” API for retrieving all LDAP groups in the TA system. For more information, refer to:  <b>Tidal Automation REST API Reference Guide — Chapter 3 — Users</b></p>

Feature	Description
<p>Support for Time zone Option in Time Formats</p>	<p>New time formats with a time zone option have been added for both the Application Format and Banner Format functionalities in TA.</p> <p>For more information, refer to:</p> <ul style="list-style-type: none"> <li>■ <b>Tidal Automation User Guide — Chapter 2 — Getting Started</b> ■ <b>Tidal Automation User Guide — Chapter 13 — Variables</b></li> </ul>
<p>REST API Calls for SAP BusinessObjects Business Intelligence (BOBI) Web Intelligence Reports</p>	<p>New REST API calls are added for fetching prompts and scheduling BOBI (Business Objects Business Intelligence) Web Intelligence Reports in TA. These REST API calls can be used in:</p> <ul style="list-style-type: none"> <li>■ <b>Job Definition</b> and <b>JobRun Job</b> for fetching prompts for Web Intelligence Reports</li> <li>■ <b>JobRun Insert</b> for fetching prompts and scheduling Web Intelligence Reports</li> <li>■ <b>JobRun Output</b> and <b>JobRun Run</b> Info for fetching output prompts for Web Intelligence Reports</li> </ul> <p>For more information, refer to:</p> <p><b>Tidal Automation Adapter for SAP BusinessObjects Business Intelligence Guide – Chapter 2 – Configuring the Adapter</b></p>
<p>Compatibility Updates</p>	<p>This section provides the compatibility items added in this release. ■ Support for VMWare ESXi 7.0 Update 1</p> <ul style="list-style-type: none"> <li>■ Support for RHEL 7.9</li> <li>■ Support for SUSE Linux 15 SP2</li> <li>■ Support for Tidal Authentication with RedHat Directory Server</li> <li>■ Support for Microsoft security update to enable or disable enforcement mode on Windows Server</li> </ul>
<p>@version 6.5.8</p>	<p>*****</p>

Feature	Description
<h3>Generating and managing API Tokens from the TA Web Client</h3>	<p>Starting with 6.5.8 release, API tokens can be generated and managed from the TA Web Client. A user can generate/re-generate, copy, download, view, and delete an API token based on the security policies assigned to the user.</p> <p>If the Password Vault feature is enabled in Tidal Automation, the API tokens created or generated from the TA Web Client are stored both in the Password Vault as well as in the TA database. By default, the API token is stored in the location “tidal/tokens” in the Password Vault. To store the API token in a location other than this default location, add the location to the token name, when creating or modifying the API token in TA. For example, if the API token name is “apitokens/mytoken”, then the API token “mytoken” is stored in the location “tidal\apitokens” in the Password Vault.</p> <p>For more information, see:</p> <p>Tidal Automation User Guide — Chapter 3 — Users</p>
<h3>Password Vault Enhancements</h3>	<p>A new configuration parameter, Store Tokens, is shown on the System Configuration &gt; Vault tab as part of this implementation. If this parameter is set to Y, the API tokens are stored in both the Password Vault and the TA database. If the parameter is set to N, the API tokens are stored only in the TA database.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 2 — Getting Started</li> </ul> <p>Tidal Automation Installation Guide — Chapter 14 — Basic TA Configuration</p>
<h3>Graphical View Enhancements</h3>	<p>The following enhancements are added for Graphical Views:</p> <ul style="list-style-type: none"> <li>• A new graphical view Grouping Diagram has been added in TA to view multiple job groups in a single location. You can expand and collapse to view child jobs and groups (expand) or hide child jobs and groups (collapse).</li> <li>• A new context menu with the following options has been added to all graphical diagrams: <ul style="list-style-type: none"> <li>▪ — Statistics – Shows job statistics such as Completed Normally, Completed Abnormally, Launch Errors, Total Reruns, and  Number of Filtered Jobs for all jobs, jobs in the production schedule, and unscheduled jobs.</li> <li>▪ — Print – Prints the diagram based on the selected output type.</li> <li>▪ — Refresh – Refreshes the graphical diagram.</li> </ul> </li> <li>• Two options - Insert Into Schedule and Remove Job(s) from Schedule - now appear in the context menu of job or job group nodes for PERT diagrams, Critical Path diagrams, Double Tree diagrams, and Grouping diagrams.</li> <li>• A new Add Job Parent option now appears in the Job Node context menu for the PERT diagram and the Critical Path diagram.</li> </ul>

Feature	Description
	<p>For more information, see:</p> <p>Tidal Automation User Guide — Chapter 8 — Business Views / Graphical Views</p> <ul style="list-style-type: none"> <li>•</li> </ul>
<h3>Dashboard Enhancements</h3>	<p>The following Dashboard enhancements are added:</p> <ul style="list-style-type: none"> <li>• A new data type called SLA Activity has been added.</li> <li>• A new chart type called SLA Line Graph has been added. This graph plots a line graph of four separate SLA Event Statuses. Data sets can be toggled on/off by clicking the status in the graph legend.</li> <li>• Multiple Dashboard pages can be added by clicking Add + adjacent to the selected Dashboard title. Users can switch between these new Dashboards.</li> <li>• A new element type called Alerts has been added. This element lists all alert messages in the system for the dates specified in metadata.</li> <li>• The enhanced Line Graph now displays multiple values as separate lines on the graph.</li> <li>• The enhanced Live Line Chart now displays data downloads immediately (previously, there was a 30-second delay).</li> </ul> <p>For more information, see: Tidal Automation Dashboard User Guide</p>
<h3>Validation Policy Enhancements</h3>	<p>In addition to Jobs, Variables, Calendars, and Virtual Resources, users can now define Validation Policies for SLA Policies and Tags and add those policies to a workgroup.</p> <p>For more information, see: Tidal Automation User Guide — Chapter 3 — Users</p>
<h3>FTP Query Builder Enhancements</h3>	<p>A new Command Builder button has been added to the FTP Job Definition &gt; FTP tab for FTP operations "MPUT Files" and "MGET Files". Click the Command Builder button to open the new user interface, which is used to build the query.</p> <p>For more information, see: Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</p>
<h3>Calendar Enhancements</h3>	<p>The Calendar offset range has been increased from 31 days to 365 days both on the Details tab and Conditions tab of the Calendar Subset Definition and Calendar Group Definition dialog boxes.</p> <p>For more information, see: Tidal Automation User Guide — Chapter 9 — Controlling Production</p>
<h3>Job Output Base Directory for JDBC and Oracle Database Adapters</h3>	<p>The output of SQL jobs in the JDBC Adapter and PL/SQL jobs in the Oracle DB Adapter can now be stored in the directory path built from the:</p> <ul style="list-style-type: none"> <li>• Base directory path (Master path) specified by the sysval "195" and</li> <li>• The path specified in the Output Directory Path field in the Oracle DB Job Definition &gt; OracleDB tab or JDBC Job Definition &gt;</li> </ul> <p>JDBC Job tab. This path is relative to the base directory path (Master path).</p>



Feature	Description
	<p>For example, if the base directory path is /opt/Tidal/ and the output directory path is subdir, then the resulting directory path would be /opt/Tidal/{adapter_guid}/subdir, where the output file (specified in the Output File Name field) that contains the job output of the adapters is stored.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation Adapter for JDBC Guide — Chapter 3 — Defining JDBC Jobs</li> </ul> <p>Tidal Automation Adapter for Oracle Database Guide — Chapter 3 — Using the Adapter</p>
<p><b>Support for PostgreSQL</b></p>	<p>Starting with TA 6.5.8, Tidal Automation supports the PostgreSQL database. Tidal Automation supports PostgreSQL versions 10, 11, 12, and 13. The PostgreSQL database is supported for both Windows and Unix installations of the TA Master and TA Client Manager. For more information about the supported Windows and Unix Operating Systems, see the Tidal Automation Compatibility Matrix.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation Installation Guide — Chapter 3 — Installing the TA Master for Windows</li> <li>Tidal Automation Installation Guide — Chapter 4 — Installing the TA Master for Unix</li> <li>Tidal Automation Installation Guide — Chapter 5 — Installing the Client Manager</li> <li></li> </ul>
<p><b>Job Dependency Enhancements</b></p>	<p>The following enhancements are added in the Job Dependency Definition dialog box:</p> <ul style="list-style-type: none"> <li>Four statuses, Exists, Waiting, Running, and Done, are added to the Status field.</li> </ul> <p>— Exists - Indicates that the job with any status is present on that day.</p> <p>— Waiting - Includes any status that indicates that the job is waiting and not yet in the Running state. Waiting statuses are: Waiting on Group, Waiting on Dependencies, Waiting on Resource, Waiting on Operator, Held, Deferred, Cancelled Pending, Agent Unavailable, Agent Inactive, and Agent Outage.</p> <p>— Running - Includes any status that indicates that the job is launched and not yet in the Done state. Running statuses are: Active, Launched, Running, Suspended, Waiting on Children, Active Waiting On Children, Orphaned, Completed Normally (Pending Output), Completed Abnormally (Pending Output), and Externally Defined (Pending Output).</p> <p>— Done - Includes any status that indicates that the job has completed running or was not able to run. Done statuses are: Completed Normally, Completed Abnormally, Externally Defined, Cancelled Normally, Error Occurred, Timed Out, Cancelled, Timed Out For Day, Skipped, and Aborted.</p> <ul style="list-style-type: none"> <li>A new checkbox, Exit code, has been added. When this checkbox is selected, both the exit code criteria and the job status condition must be satisfied for the job dependency to be met.</li> </ul>

Feature	Description
	<p>For more information, see: Tidal Automation Installation Guide — Chapter 3 — Installing the TA Master for Windows</p>
<p><b>TESM Command for Adapter and Agent Connections</b></p>	<p>A new TESM command, listnode, has been added to the TA command line program to list the information about Adapter and Agent connections. This command can run only when the TA Master is running.</p> <p>For more information, see: Tidal Automation Command Line Program Guide — Chapter 3 — Using the Master Command Line Utility</p>
<p><b>API Method for Retrieving JobRun ID</b></p>	<p>A new API method, Job.insertWaitForID, has been added. This API method inserts a job into the schedule and waits for API timeout for the jobrun id to return.</p> <p>For more information, see: Tidal Automation REST API Reference Guide — Chapter 3 — Using the Master Command Line Utility</p>
<p><b>Support for Google Cloud Service Accounts in the Apache Airflow Adapter</b></p>	<p>Added support for Google Cloud Service accounts in the Tidal Automation Adapter for Apache Airflow.</p> <p>For more information, see: Tidal Automation Adapter for Apache Airflow Guide — Chapter 2 — Configuring an Adapter</p>
<p><b>Tracking Audit Log Messages and User Sessions for API Logins</b></p>	<p>The UserSession.ClientType API object now tracks the audit log messages (see Operations &gt; Logs &gt; Source column in the Web UI) and connected users (see Operations &gt; Master Status &gt; Connected Users &gt; Client Type column in the Web UI) for API logins. REST API tools such CURL should be used to track the log messages with respect to API logins.</p>
<p><b>Job Definition Enhancements</b></p>	<p>The following Job Definition enhancements are added:</p> <ul style="list-style-type: none"> <li>• Three new columns, Ready, Launch, and Wait Duration, are added to the Job Definition &gt; History tab.</li> <li>• The column names Est Start Time, Act Start Time, Act End Time, and Actual Duration in the Job Definition &gt; History tab have been changed to Est Start, Act Start, Act End, and Duration.</li> </ul> <p>Two new columns, Ready Time and Wait Duration, are added to the Job Definition &gt; SLA History tab. For more information, see: Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</p>
<p><b>JobRun Enhancements</b></p>	<p>The following JobRun enhancements are added:</p> <ul style="list-style-type: none"> <li>• Three new columns, Ready, Launch, and Wait Duration, are added to the Job Details &gt; History tab.</li> <li>• The column names Est Start Time, Act Start Time, Act End Time, and Actual Duration in the Job Details &gt; History tab have been changed to Est Start, Act Start, Act End, and Duration.</li> </ul>

Feature	Description
	<ul style="list-style-type: none"> <li>• Two new columns, Ready Time and Wait Duration, are added to the Job Details &gt; SLA History tab.</li> <li>• The following options are added to both the Jobs and Job Groups context menus in the Job Activity pane: <ul style="list-style-type: none"> <li>○ View PERT Diagram</li> <li>○ View Radial Tree Diagram</li> <li>○ View Radial Graph Diagram</li> </ul> </li> <li>• The following options are added to the Job Groups context menu in the Job Activity pane: <ul style="list-style-type: none"> <li>○ View Gantt Chart</li> <li>○ View Status Board</li> <li>○ View Grouping Diagram</li> </ul> </li> <li>• The following options are added to the Jobs context menu in the Job Activity pane: <ul style="list-style-type: none"> <li>○ View Critical Path Diagram</li> <li>○ View Double Tree Diagram (One Level and All Levels)</li> </ul> </li> </ul> <p>For more information, see: Tidal Automation User Guide — Chapter 4 — Job Activity</p>
<b>Variables Enhancements</b>	<p>The following Variables enhancements are added:</p> <ul style="list-style-type: none"> <li>• Three new columns Duration, Estimated Duration, and Waiting on Resources Time are added to Variables &gt; Job Run Variables.</li> <li>• Two new columns, Start Time and End Time, are added to Variables &gt; SLA Variables.</li> </ul> <p>For more information, see: Tidal Automation User Guide — Chapter 13 — Variables</p>
<b>SLA Policy Enhancements</b>	<p>The following SLA Policy enhancements are added:</p> <ul style="list-style-type: none"> <li>• Two new columns, Ready Time and Wait Duration, are added to the: <ul style="list-style-type: none"> <li>- SLA Policy (Edit) &gt; SLA History tab.</li> <li>- SLA Rule (Edit) &gt; SLA History tab.</li> <li>- SLA Activity pane context menu.</li> </ul> </li> <li>• Whenever an SLA Policy is enabled or disabled via the SLA Policies pane context menu, the Effective Date dialog box is launched.</li> </ul> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 9 — Controlling Production</li> </ul> <p>Tidal Automation User Guide — Chapter 11 — SLA Activity</p>
<b>Renaming Remote Job Adapter</b>	<p>The Remote Job Adapter has been renamed as Windows Task Adapter.</p> <p>For more information, see: Tidal Automation Adapter for Windows Task Guide</p>

Feature	Description												
<b>ServiceNow Adapter Enhancements</b>	<p>The following enhancements are added to the ServiceNow Adapter:</p> <ul style="list-style-type: none"> <li>• Added support for conditional logic for Action and Event search criteria.</li> <li>• Added support for specifying output for ServiceNow events.</li> <li>• Added support for setting dispositions for ServiceNow events.</li> </ul> <p>Important Note: All the above enhancements are supported only on the TA Web Client.</p> <p>For more information, see:</p> <p>Tidal Automation Adapter for ServiceNow ITSM Guide — Chapter 2 — Using the Adapter</p>												
<b>Transporter Enhancements</b>	<p>When the IGNOREJOBDEPEXPORTIMPORT parameter is set to true in the transporter.props file, the Transporter export function will export only direct predecessor jobs. The Export log will contain details about the exported job group.</p> <p>For more information, see:</p> <p>Tidal Automation Transporter Guide — Chapter 11 — Using the Transporter Export/Import Utility</p>												
<b>Compatibility Updates</b>	<p>The following table provides the compatibility items supported in TA 6.5.8.</p> <p>Table 1 Compatibility Updates</p> <table border="1" data-bbox="492 951 1263 1150"> <thead> <tr> <th data-bbox="492 951 727 982">Compatibility Item</th> <th data-bbox="727 951 1263 982">Supported for</th> </tr> </thead> <tbody> <tr> <td data-bbox="492 982 727 1014">SAP JCO 3.1.4</td> <td data-bbox="727 982 1263 1014">SAP Adapter</td> </tr> <tr> <td data-bbox="492 1014 727 1045">Informatica 10.5</td> <td data-bbox="727 1014 1263 1045">Informatica Adapter</td> </tr> <tr> <td data-bbox="492 1045 727 1077">RHEL 8.4</td> <td data-bbox="727 1045 1263 1077">TA Master, Client Manager, and Agent</td> </tr> <tr> <td data-bbox="492 1077 727 1108">OEL 8.4</td> <td data-bbox="727 1077 1263 1108">TA Master, Client Manager, and Agent</td> </tr> <tr> <td data-bbox="492 1108 727 1140">Oracle DBaaS 19c</td> <td data-bbox="727 1108 1263 1140">TA Master</td> </tr> </tbody> </table>	Compatibility Item	Supported for	SAP JCO 3.1.4	SAP Adapter	Informatica 10.5	Informatica Adapter	RHEL 8.4	TA Master, Client Manager, and Agent	OEL 8.4	TA Master, Client Manager, and Agent	Oracle DBaaS 19c	TA Master
Compatibility Item	Supported for												
SAP JCO 3.1.4	SAP Adapter												
Informatica 10.5	Informatica Adapter												
RHEL 8.4	TA Master, Client Manager, and Agent												
OEL 8.4	TA Master, Client Manager, and Agent												
Oracle DBaaS 19c	TA Master												
<b>Deprecation Notice</b>	<p>The legacy SOAP interface has been deprecated in TA 6.5.8.</p>												
<b>@version 6.5.9</b>	<p>*****</p>												
<b>Authorization Policies</b>	<p>Authorization Policies allow organizations to integrate their Active Directory and LDAP (Lightweight Directory Access Protocol) to authenticate users who have access to TA workflow jobs. Using the new Authorization Policies, TA administrators can: 1) specify mapping rules that dynamically add users from the LDAP directory and attributes, 2) assign users to workgroups, and 3) apply appropriate security policies to the user. Administrators can also use shared owner policies to provide users in other workgroups with limited access to job definitions and job runs.</p> <p>An Authorization Policy allows the TA Administrator to define a set of LDAP rules against which an LDAP/AD user logging into TA can be verified, mapped to a matching workgroup (primary) in TA, and assigned with the security policies of the workgroup that the user has been mapped to.</p>												

Feature	Description
	<p>With the introduction of Authorization Policies in TA 6.5.9, the LDAP group membership of a user logging into TA is mapped to the LDAP groups defined in TA. The new LDAP rules defined in an Authorization Policy can be used to match the LDAP group membership of the user logging into TA.</p> <p>In addition to providing user access to primary workgroup objects, the Authorization Policy also enables the TA Administrator to define a set of matching rules that provides the user with the shared ownership security rights to other secondary TA workgroups.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Getting Started with Tidal Automation Authorization Policies</li> <li>• Tidal Automation User Guide — Chapter 3 — Users</li> </ul>
<p><b>Shared Owner Policies</b></p>	<p>Tidal Automation allows shared owner policy definitions for job and job group objects based on policy rules and shared owners. A shared owner policy is defined with one or more rules for job and job group objects in the Tidal Automation system.</p> <p>A shared owner rule contains the expression that evaluates data in the Name field of a TA object. Currently, this rule pertains to jobs and job groups.</p> <p>A shared owner policy containing a collection of policy rules and shared owners is enforced for jobs and job groups with names matching the conditions specified in these rules. The security policy of the shared owners added to a shared owner policy is determined in the shared ownership rule definitions of Authorization Policies.</p> <p>Important Note: A shared owner is not allowed to change the primary owner of the job definition. For more information, see: Tidal Automation User Guide — Chapter 3 — Users</p>
<p><b>Authorize Runtime Users to Launch Jobs</b></p>	<p>The Activities &gt; System Configuration dialog box contains a new Runtime User Control tab, added in this release. This tab provides the settings for allowing or disallowing runtime users to launch jobs.</p> <p>When Runtime User Control is enabled, the scheduler determines if the runtime user in the job is configured as an allowed user in the Runtime User Control tab before a job is launched. A job is not allowed to change state from Waiting on Resource to Launched unless the runtime user employed in the job is part of the list of allowed users.</p> <p>4. For more information, see: Tidal Automation User Guide — Chapter 2 — Getting Started</p>
<p><b>Assign Agent Lists to Users and Workgroups</b></p>	<p>A new setting, Assign Agent Lists to Users and Workgroups, now appears in the Activities &gt; System Configuration &gt; System tab. When this setting is selected:</p> <ul style="list-style-type: none"> <li>• An additional tab, Agent Lists, is shown on the User Definition, LDAP Group Definition, and Workgroup Definition dialog boxes for super users.</li> <li>• An additional checkbox, Assign Agent Lists, is added to both the Users and the Workgroups security functions. When the Assign Agent Lists checkbox is selected from the Users/Workgroups security function, the Agent Lists tab is shown on the User Definition/Workgroup Definition dialog box for non-super users.</li> </ul>

Feature	Description
	<ul style="list-style-type: none"> <li>• The Assign Agent Lists security function allows designated users or workgroups to assign agent lists to jobs or job groups when those job/job groups are created or edited. As a result, users and workgroups access only assigned agent lists.</li> <li>• Tidal Automation User Guide — Chapter 2 — Getting Started</li> <li>• Tidal Automation User Guide — Chapter 3 — Users</li> </ul>
<h3>Enforce Workgroups as Owners</h3>	<p>The following settings have been added to the Activities &gt; System Configuration &gt; System tab for Workgroups:</p> <ul style="list-style-type: none"> <li>• All objects must be owned by Workgroups – By selecting this option: <ul style="list-style-type: none"> <li>▪ — Only workgroups are shown in the Owner dropdown list for a TA object, when the object is created or edited.</li> <li>▪ — A TA object can be copied only if the object is owned by a workgroup.</li> </ul> </li> <li>• Enforce Workgroup as owner when pre-existing objects are modified – This option is enabled only if the All objects must be owned by Workgroups option is selected. <ul style="list-style-type: none"> <li>▪ — When this option is selected, changes to a TA object can be saved only if the existing object owner is a workgroup.</li> <li>▪ — When this option is not selected, changes to a TA object such as Jobs, Variables, and Calendars can be saved, even if the existing object owner is not a workgroup.</li> </ul> </li> </ul> <p>For more information, see: Tidal Automation User Guide — Chapter 2 — Getting Started</p>
<h3>Copy Security Policy</h3>	<p>A security policy can now be copied using the new Copy Security Policy option added to the Security Policies pane context menu and the TA toolbar.</p> <p>For more information, see: Tidal Automation User Guide — Chapter 3 — Users</p>
<h3>File permissions for Linux/Unix-specific TA Components</h3>	<p>Only the owner has read/write permissions for the logs directory, and read/write/execute permissions for the tesm, fm, cm, tmkdea, and tesmcmd scripts for TA components installed on Linux/Unix.</p> <p>For more information, see: Tidal Automation Installation Guide — Chapter 2 — Installation Prerequisites</p>
<h3>Agent List Enhancements</h3>	<p>The following enhancements have been added for Agent Lists:</p> <ul style="list-style-type: none"> <li>• Enable/Disable Agent List is a new security function added to the Agent Lists security category. By selecting this option, the Enable and Disable options are shown in the Agent Lists pane context for non-super users.</li> <li>• Enable and Disable context menu options of the Agent Lists pane are not applicable for Broadcast type Agent Lists.</li> <li>• A new checkbox, Enabled, has been added to the Agent List Definition dialog box.</li> <li>• The first column in the Agent Lists pane grid displays the current agent list: <ul style="list-style-type: none"> <li>• — A green light is shown if one or more agents in the agent list are active.</li> <li>• — A red light is shown if all agents in the agent list are inactive.</li> <li>• — A gray light is shown if no agent is added to the agent list or an agent list is disabled.</li> </ul> </li> </ul>

Feature	Description
	<ul style="list-style-type: none"> <li>• A new column, Enabled, appears in the Agents List pane to indicate whether an agent list is enabled or disabled.</li> <li>• A new Status column, added to the Agents List pane, displays one of the following statuses: <ul style="list-style-type: none"> <li>• — Active — If one or more agents in a parent/child agent list is active.</li> <li>• — Inactive — If all agents in an agent list are inactive.</li> <li>• — No Agent — If no agent is added to the parent/child agent list.</li> <li>• — Disabled — If an agent list is disabled.</li> </ul> </li> </ul> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 3 — Users</li> </ul> <p>Tidal Automation User Guide — Chapter 9 — Controlling Production</p>
<p><b>Database Adapter Enhancements</b></p>	<p>The following enhancements are added to the JDBC Adapter Job Definition, Oracle Database Adapter Job Definition, and Microsoft SQL Server Job Definition dialog boxes:</p> <ul style="list-style-type: none"> <li>• The Redirect output to file functionality displayed on the JDBC Job tab and OracleDB tab, is independent of the Save Output Option in the Options tab. When the Redirect output to file option is selected, the job output is stored in a file, irrespective of the Save Output Option value.</li> <li>• The Output Base Directory field specifies the output base directory, if configured. This is a read-only field. <ul style="list-style-type: none"> <li>— If the output base directory is not configured, the field value is shown as “not configured” in the Output Base Directory field. In this case, the job will not execute and will terminate with an Error Occurred status.</li> <li>— If the output base directory is configured, the base directory path (activated by the sysval configuration ‘195’) is shown in the Output Base Directory field.</li> </ul> </li> <li>• The Oracle Database/JDBC Adapter/Microsoft SQL Server Adapter GUID can be added as a subdirectory to the output base directory. This is optional.</li> <li>• A new field, Output Relative Directory, has been added to the JDBC Job tab, Oracle DB tab, and MSSql tab. This field specifies the directory path relative to the output base directory path.</li> </ul> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation Adapter for JDCBC Guide — Chapter 3 — Defining JDBC Jobs</li> <li>• Tidal Automation Adapter for Oracle Database Guide — Chapter 3 — Using the Adapter</li> </ul> <p>Tidal Automation Adapter for Microsoft SQL Server Guide — Chapter 3 — Defining Microsoft SQL Jobs</p>
<p><b>SSIS Support for the Microsoft SQL Server Adapter</b></p>	<p>Starting with TA 6.5.9, TA provides support for SQL Server Integration Services (SSIS) for the Microsoft SQL Server Adapter. TA currently supports the following two package sources: 1) the SSIS Catalog and 2) the File System. You can select a package source from the Package Source dropdown list on the Package tab that appears by selecting the SQL Server Integration Services Package option from the Type dropdown list when adding a step for a Database Job on the MS SQL Adapter Job Definition dialog box.</p>

Feature	Description														
	<p>For more information, see: Tidal Automation Adapter for Microsoft SQL Server Guide — Chapter 3 — Defining Microsoft SQL Jobs</p>														
<h3 data-bbox="203 422 492 562">FileWatcher Command in Job Definitions</h3>	<p>Starting with TA 6.5.9, Tidal Automation supports that use of a new FileWatcher command on the Program tab of a Job Definitions dialog box.</p> <p>A FileWatcher job supplements existing job definitions with this special <code>//\$FileWatcher</code> command that handles file and directory monitoring using the security profile of the runtime user specified on the job. The FileWatcher jobs can set specific criteria for file monitoring that determines when the job completes successfully. These criteria can include combinations of:</p> <ul style="list-style-type: none"> <li>• Whether or not a file exists</li> <li>• Whether and when a file is modified</li> <li>• When a file reaches a specified size</li> </ul> <p>When all of the specified criteria are met, the job completes successfully.</p> <p>Note: Runtime users running the FileWatcher jobs must have permissions to access the respective files and directories in the Unix Agent. Otherwise, the jobs will fail.</p> <p>For more information, see: Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</p>														
<h3 data-bbox="203 1003 492 1283">Sysval Configuration for controlling the Job Time Dependency Behavior</h3>	<p>A new Sysval '198' has been implemented to control the time dependency behavior for jobs. Note:</p> <ul style="list-style-type: none"> <li>• If the time window of a job begins earlier than the time window of the parent group, the job will only run when the time dependency of the parent group is met.</li> <li>• For jobs using master time zone or agent time zone.</li> </ul> <p style="text-align: center;">Table 1-1</p> <table border="1" data-bbox="492 1297 1453 1633"> <thead> <tr> <th data-bbox="492 1297 992 1360">Scenario</th> <th data-bbox="992 1297 1175 1360">Sysval '198' Configuration</th> <th data-bbox="1175 1297 1453 1360">Behavior</th> </tr> </thead> <tbody> <tr> <td data-bbox="492 1360 992 1451">The time window of a job begins earlier than the time window of the parent group, but both time windows fall on the same date.</td> <td data-bbox="992 1360 1175 1451">Not Applicable</td> <td data-bbox="1175 1360 1453 1451">The job will only run when parent group is met.</td> </tr> <tr> <td data-bbox="492 1451 992 1633" rowspan="2">The time window of a job begins on an earlier date than the time window of the parent group.</td> <td data-bbox="992 1451 1175 1570">Sysval not defined</td> <td data-bbox="1175 1451 1453 1570">The job will run as per its time dependency of the parent group.</td> </tr> <tr> <td data-bbox="992 1570 1175 1633">Sysval '198' is set to Y</td> <td data-bbox="1175 1570 1453 1633">The job will run ahead of its parent group.</td> </tr> <tr> <td data-bbox="492 1633 992 1730"></td> <td data-bbox="992 1633 1175 1730">Sysval '198' is set to N</td> <td data-bbox="1175 1633 1453 1730">The job will only run when parent group is met.</td> </tr> </tbody> </table> <p>For more information, see: Tidal Automation User Guide — Chapter 4 — Job Activity</p>	Scenario	Sysval '198' Configuration	Behavior	The time window of a job begins earlier than the time window of the parent group, but both time windows fall on the same date.	Not Applicable	The job will only run when parent group is met.	The time window of a job begins on an earlier date than the time window of the parent group.	Sysval not defined	The job will run as per its time dependency of the parent group.	Sysval '198' is set to Y	The job will run ahead of its parent group.		Sysval '198' is set to N	The job will only run when parent group is met.
Scenario	Sysval '198' Configuration	Behavior													
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	Sysval '198' is set to Y	The job will run ahead of its parent group.													
	Sysval '198' is set to N	The job will only run when parent group is met.													
<h3 data-bbox="203 1730 492 1871">Authorization Policy: Security Enhancements</h3>	<p>The following properties are added to the <code>clientmgr.props</code> file:</p> <ul style="list-style-type: none"> <li>• Security.Log – This flag, which is enabled (set to Y) by default, adds security logs for user sessions in the log directory of the Client</li> </ul>														



Feature	Description
	<p>Manager. Values for this property are Y or N.</p> <ul style="list-style-type: none"> <li>• SessionSecurityLog – The logging level of session security. The output shows the session security log messages at the log level.</li> </ul> <p>The default value is INFO. Other supported types are SEVERE, FINE, FINER, and FINEST.</p> <ul style="list-style-type: none"> <li>• Security.AuthPolicy.attributeNames – Specifies a comma-separated list of case-sensitive attribute names from your AD/LDAP server. When a user signs into TA, these attribute names and their values are retrieved from the AD/LDAP server and populated in the Attributes field of LDAP Rules and Workgroup Rules definitions for Authorization Policies.</li> </ul> <p>A new sysval configuration ('196') has been added to the sysval table. With the addition of this new sysval, user attributes can be included or excluded when the user is imported from the AD/LDAP server. By default, this sysval is enabled.</p> <p>Authorization policies also allow you to extract values from LDAP group attributes and store them in variables. You can use those variables in workgroups and shared owner rules to make the rule more flexible and dynamic.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• — Before using LDAP attributes, the Tidal Administrator must define which AD/LDAP attributes to make available to authorization policies.</li> <li>• — The login session extracts values from AD/LDAP attributes that contain ASCII values; binary values are not supported. For example, if the objectGUID and objectSid attributes contain binary values, it will cause an unmarshalling exception while logging in or failed on computing Authorization Policy rules.</li> </ul> <p>For more information, see: Tidal Automation User Guide — Chapter 16 — Parameters</p>
<p><b>Dashboard Enhancements</b></p>	<p>The following Dashboard enhancements are added in this release:</p> <ul style="list-style-type: none"> <li>• Refactor Color Selection – The Dashboard now supports display color customization for Dashboard elements. To change system default colors, from the View menu, select Preferences to display the Job Activity Preferences dialog box. Select the Status Color tab. Make color changes and select OK.</li> </ul> <p>Note: Only those users designated in the Security Policies dialog box (Administration &gt; Security Policies) with Dashboard privileges can make color changes. Security Policies functionality is described in the Security Policies section of the Tidal Automation User Guide.</p> <ul style="list-style-type: none"> <li>• Data Tab in Edit Element Modal – A new Data tab now displays in the Edit Element function. In the Data tab, a table contains all Job Run data showing job rerun counts. This rerun count information is displayed in the Dashboard Element chart.</li> <li>• Pivot Tables – A new element type, Flexible Visualization, has been added to the Element Type dropdown field in the Dashboard Element dialog box. This element type can be used to add the Pivot table for Job Activity data in the Dashboard. When this element type is selected, the following fields are enabled on the Dashboard Element dialog box:</li> </ul>

Feature	Description
	<ul style="list-style-type: none"> <li>▪ — X Axis, Y Axis, and Pivot Point – These dropdown fields contain all fields from the Job Run table.</li> <li>▪ — Pivot Operation – This dropdown field contains the following operations. The selected operation is performed on the data from selected columns (X Axis, Y Axis, and Pivot Point). <ul style="list-style-type: none"> <li>— Average — Count</li> <li>— Median — Mode — Sum</li> </ul> </li> </ul> <p>Selecting the Load Table option on the Dashboard Element displays pivot table content, which can be modified directly from the Dashboard Element. The modified values can be recalculated or updated using the Refresh Table option on the element.</p> <ul style="list-style-type: none"> <li>• Graphical View Diagrams on the Dashboard – A new element type, Graphical View Diagram, has been added to the Element Type dropdown field in the Dashboard Element dialog box. When this element type is selected, the Graphical View Type dropdown field that contains the list of graphical diagrams is enabled in the Filter section.</li> </ul> <p>Selecting the Load View option on the Graphical View dashboard element displays the graphical view that contains selected Job Run data.</p> <ul style="list-style-type: none"> <li>• Collapsible Dashboard Element Menu – The element menu on the Dashboard has been modified as a collapsible menu, when selected shows the list of available Dashboard Elements.</li> </ul> <p>For more information, see: Tidal Automation Dashboard User Guide</p>
<p><b>WebService Adapter Jobs</b></p>	<p>Users can now cancel active WebService Adapter jobs.</p>
<p><b>System Event for Paused Job Launching Queue</b></p>	<p>A new system event, Queue paused, shows a message in the banner when a job launch queue is paused either from the UI or via an API call. When the queue is resumed, the message is removed from the banner.</p>
<p><b>Renaming “Amazon S3” Adapter to “S3”</b></p>	<p>The Amazon S3 Adapter has been renamed to “S3” in the TA Web Client. For more information, see: Tidal Automation Adapter for S3 Guide</p>
<p><b>Variables Button on S3</b></p>	<p>The Variables button has been added to the S3 Event Definition and S3 Job Definition dialog boxes. For more information, see: Tidal Automation Adapter for S3 Guide — Chapter 3 — Using the Adapter</p>

Feature	Description
Job and Event Definitions	
ServiceNow Adapter Enhancements	All text fields in the ServiceNow Adapter have been modified to contain a maximum of 4000 characters.
Status Check for Client Manager	<p>The following parameters are added to the clientmgr.props file to allow IT Administrators to perform a status check of the Client Manager (CM):</p> <ul style="list-style-type: none"> <li>• enable.statuscheck – Allows users to perform a status check of the CM when the status check URL <code>http(s)://&lt;cm-server&gt;:&lt;port&gt;/statuscheck</code> is accessed. Here, <code>&lt;cm-server&gt;</code> is the IP address of the CM where the status check URL is accessed and <code>&lt;port&gt;</code> is the port number of the CM. This parameter is disabled (set to N) by default.</li> <li>• statuscheck.monitor.ip.list – Specifies a comma-separated list of remote/local IP addresses from where the status check URL can be accessed. When no values are specified, the status check URL is accessible from any client machine or IP address.</li> </ul> <p>When accessing the status check URL, one of the following may occur:</p> <ul style="list-style-type: none"> <li>• — When the HTTP code 204 is returned, it indicates that the CM is not active.</li> <li>• — When the HTTP response body and the HTTP response header X-TA-CM-STATUS show the text ACTIVE-STANDALONE, it indicates that while the CM is initialized and accessible, it is not connected to the TA Master.</li> <li>• — When the HTTP response body and the HTTP response header X-TA-CM-STATUS show the text ACTIVE, it indicates that the CM is accessible and also connected to the Master.</li> </ul> <p>— When the Client Manager login page is displayed, it indicates that the status check is not enabled. For more information, see: Tidal Automation User Guide — Chapter 16 — Parameters</p>
Job Enhancements	<p>The following enhancements are added in the Job Definition dialog box:</p> <ul style="list-style-type: none"> <li>• A new checkbox, Relative to specified group in job activity (otherwise, for day) appears on the Job Dependency Definition dialog box. This checkbox, when selected, defines dependency between two jobs with dissimilar direct parent groups that share a common ancestor group under the same root hierarchy. In this case, job instance matching is performed relative to the common ancestor group, rather than globally for the day.</li> </ul> <p>When the Relative to specified group in job activity (otherwise, for day) checkbox is selected, a Group dropdown field is displayed. From the down arrow button, you can select the common ancestor from the ancestors of the job the current job depends on. You can also click the Browse button to select any group to be the common ancestor that this dependency will be relative to in job activity.</p>

Feature	Description
	<p>When this option is selected:</p> <ul style="list-style-type: none"> <li>▪ — The Relative to group (otherwise, for day) and the Relative to Root Group in Job Activity checkboxes are cleared, if selected earlier.</li> <li>▪ — The Date Offset option is disabled as the job dependencies within the common ancestor group are met on the same production day.</li> </ul> <ul style="list-style-type: none"> <li>• A new SLA Status column appears in the grid on the History tab of the Job Definition dialog box. This column indicates the SLA status for each job instance based on one of the following SLA levels the job instance reaches during its life cycle. <ul style="list-style-type: none"> <li>• — None - This level is assigned to a job instance without an SLA Time window.</li> <li>• — On Time/Met - This level is assigned to a job instance when it completes on time.</li> <li>• — At Risk - This level is assigned to an in-progress job instance which is at the risk of violating the SLA Time window.</li> <li>• — May Breach - This level is assigned to an in-progress job instance which may breach the SLA Time window.</li> <li>• — In Risk - This level is assigned to a job instance that completes within the SLA Risk window.</li> <li>• — In Breach - This level is assigned to a job instance when the job instance completes within the SLA Breach window or beyond the SLA Risk window in the absence of SLA Breach window.</li> <li>• — Breached - This level is assigned to a job instance that completed beyond the SLA Breach window.</li> </ul> </li> </ul> <p>Note: All the job instances assigned with the SLA status At Risk or higher level are marked as Critical. For more information, see: Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</p>
<p><b>Job Activity Enhancements</b></p>	<p>A new SLA Status column appears on the Job Activity pane and in the grid on the History tab of the Job Details dialog box. This column indicates the SLA status for each job instance based on one of the following SLA levels the job instance reaches during its life cycle.</p> <ul style="list-style-type: none"> <li>• None - This level is assigned to a job instance without an SLA Time window.</li> <li>• On Time/Met - This level is assigned to a job instance when it completes on time.</li> <li>• At Risk - This level is assigned to an in-progress job instance which is at the risk of violating the SLA Time window.</li> <li>• May Breach - This level is assigned to an in-progress job instance which may breach the SLA Time window.</li> <li>• In Risk - This level is assigned to a job instance that completes within the SLA Risk window.</li> <li>• In Breach - This level is assigned to a job instance when the job instance completes within the SLA Breach window or beyond the SLA Risk window in the absence of SLA Breach window.</li> </ul> <p>Breached - This level is assigned to a job instance that completed beyond the SLA Breach window. Note: All the job instances assigned with the SLA status At Risk or higher level are marked as Critical.</p>
<p><b>LDAP and Active Directory Authentication Enhancements</b></p>	<p>The following enhancements are added for Active Directory and LDAP Authentication:</p> <ul style="list-style-type: none"> <li>• — ActiveDirectory.AuthenticationMethod and LDAP.AuthenticationMethod — The authentication method that is required to connect to the directory to do a directory lookup. Set to none if the directory can be looked up anonymously. Set to simple if both</li> </ul>

Feature	Description												
	<p>the user (BindUser) and password (BindPassword) are required to connect to the directory to do a directory lookup.</p> <ul style="list-style-type: none"> <li>LDAP.UserSearchAttribute — Specifies an attribute which is not part of user DN. This attribute is used to search and locate a user. The located user’s DN is then used to authenticate the user to TA.</li> </ul> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation User Guide — Chapter 16 Parameters</li> </ul> <p>Tidal Automation Installation Guide — Chapter 14 — Basic TA Configuration</p>												
<p><b>Compatibility Updates</b></p>	<p>The following table provides the compatibility items supported in TA 6.5.9.</p> <p>Table 2 Compatibility Updates</p> <table border="1" data-bbox="592 730 1242 997"> <thead> <tr> <th>Compatibility Item</th> <th>Supported for</th> </tr> </thead> <tbody> <tr> <td>PeopleTools 8.59</td> <td>PeopleSoft Adapter</td> </tr> <tr> <td>JDE orchestrator 9.2.5</td> <td>JDE Orchestrator Adapter</td> </tr> <tr> <td>SUSE Enterprise V15 SP3</td> <td>Note: Provides minor version support TA Master, Client Manager, and Agent</td> </tr> <tr> <td>Windows Server 2022</td> <td>TA Master, Client Manager, and Agent</td> </tr> <tr> <td>JDE Tools 9.2.6</td> <td>JDE Adapter</td> </tr> </tbody> </table>	Compatibility Item	Supported for	PeopleTools 8.59	PeopleSoft Adapter	JDE orchestrator 9.2.5	JDE Orchestrator Adapter	SUSE Enterprise V15 SP3	Note: Provides minor version support TA Master, Client Manager, and Agent	Windows Server 2022	TA Master, Client Manager, and Agent	JDE Tools 9.2.6	JDE Adapter
Compatibility Item	Supported for												
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JDE Tools 9.2.6	JDE Adapter												
<p>@version 6.5.10</p>	<p>*****</p>												
<p><b>Terminator Jobs</b></p>	<p>Starting with TA 6.5.10, Tidal Automation supports a new job type known as a Terminator job. Terminator job definitions provide conditional job groupings based on certain job statuses. With the implementation of terminator jobs, TA provides the mechanism to:</p> <ul style="list-style-type: none"> <li>Control the termination of remaining jobs in a job group when a conditional branch of a job stream is executed or when a job is completed abnormally.</li> <li>Control/assert the completion status of a job group.</li> </ul> <p>The following statuses identify jobs/job groups undergoing termination:</p> <ul style="list-style-type: none"> <li>Terminate Waiting — A job group that is terminating, but is waiting for dependencies because the group has a child that ignored the terminate request. The group must satisfy its dependencies before allowing its children to run.</li> <li>Terminate Ready — A job group that is terminating, but is waiting on required resources because the group has a child that ignored the terminate request. The group must lock its resources before allowing its children to run.</li> <li>Terminating — A job group remains in a Terminating status until all of its child jobs are terminated or reach a final status if they were running.</li> <li>Terminated — A job which Terminated meaning it did not or will not run. As part of the Terminator jobs implementation: <ul style="list-style-type: none"> <li>The Activities &gt; System Configuration &gt; Defaults tab contains a new setting, Ignore Terminate Request.</li> <li>The Options tab in the Job Group Definition and Job Definition dialog boxes contains a new section, Terminate parent on. This section contains</li> </ul> </li> </ul>												

Feature	Description
	<p>the options shown below. The job/job group sends a terminate request to its immediate parent group based on the condition related to each selected option:</p> <ul style="list-style-type: none"> <li>• — Error - An error occurred during the jobrun.</li> <li>• — Abnormal Completion - The job did not complete normally.</li> <li>• — Abort - The job was aborted.</li> </ul> <ul style="list-style-type: none"> <li>• A new section, On Terminate request, now appears in the Options tab of the Job Group Definition and Job Definition dialog boxes. This new section contains the following options: <ul style="list-style-type: none"> <li>• — Ignore - When checked, the job/job group ignores the termination request.</li> <li>• — Abort if active - This option, which is displayed only for jobs, is enabled only if the Ignore option is checked. When the Abort if active option is checked: <ul style="list-style-type: none"> <li>— The active job is aborted.</li> <li>— The Ignore option is disabled.</li> <li>— Terminate parent - This option is displayed only for job groups. When the option is selected, the job group sends a terminate request to its immediate parent.</li> </ul> </li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• The Override tab in the Job Details dialog box contains a new Completion Status field for Terminator jobs.</li> <li>• The Security Policies &gt; Job Control Category dialog box has a new Terminate security permission.</li> <li>• For jobs undergoing termination, select the Override option from the Job Control Submenu to supersede all unmet dependencies and change the selected job status from Terminate Waiting to Terminate Ready. The job must have the Terminate Waiting status for this job control function to be available.</li> </ul> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 2 — Getting Started</li> <li>• Tidal Automation User Guide — Chapter 3 — Users</li> <li>• Tidal Automation User Guide — Chapter 4 — Job Activity</li> <li>• Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</li> <li>• Tidal Automation REST API Reference Guide — Chapter 6 — Job</li> <li>• Tidal Automation REST API Reference Guide — Chapter 8 — Terminator Job</li> <li>• Tidal Automation REST API Reference Guide — Chapter 9 — JobRun</li> <li>• Tidal Automation REST API Reference Guide — Appendix A — REST API Object Descriptions</li> </ul>
<p><b>File Watcher Jobs</b></p>	<p>A new File Watcher job type monitors files and directories on Windows or Unix Agents. A File Watcher job completes normally if the specified criteria meet a user-defined Poll Duration. Runtime users specified in File Watcher jobs must be operating-system users with access to the specified directories and files on Windows or Unix Agents.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 4 — Job Activity</li> </ul>

Feature	Description
	<ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</li> <li>• Tidal Automation REST API Reference Guide – Chapter 7 – File Watcher Job</li> </ul> <p style="text-align: center;">Tidal Automation REST API Reference Guide – Appendix A – REST API Object Descriptions</p>
<h2>Job Enhancements</h2>	<p>The following Job enhancements are added in this release:</p> <ul style="list-style-type: none"> <li>• Last Run – This checkbox appears in the Job Dependency Definition dialog box. When selected, the job dependency is satisfied by looking up the predecessor’s Last Run Status.</li> </ul> <p>When this option is selected, the following fields are disabled: — Occurrence — Offset — Relative to group (otherwise, for day)</p> <ul style="list-style-type: none"> <li>• — Relative to specified group in job activity (otherwise, for day)</li> <li>• — Date Offset</li> <li>• The Security Policies &gt; Job Control Category dialog box has a new Edit Last Run Status security permission.</li> <li>• Edit Last Run Status – The Jobs pane context menu now contains the Edit Last Run Status option. This option is enabled only if users have the Edit Last Run Status security permission. To set the job’s last run status, select this option that displays the Edit Last Run Status dialog box. This dialog box contains the following fields: <ul style="list-style-type: none"> <li>• — Status – The last run status of the job.</li> <li>• — Exit Code – Exit code based on the job’s completion status.</li> <li>• — Run Date – The date and time the job ran last.</li> <li>• — Act. Duration – Duration of the jobrun (in minutes and seconds).</li> </ul> </li> <li>• The History tab in the Job Definition dialog box now contains a new Last Run Status section. This section contains the read-only fields shown below. These fields display the job’s last run data. <ul style="list-style-type: none"> <li>— JobNo.-Thelastrunidofthejob. <ul style="list-style-type: none"> <li>• — Status – The last run status of the job.</li> <li>• — Run Date – The date and time the job ran last.</li> <li>• — Exit Code – Exit code based on the job’s completion status.</li> </ul> </li> </ul> </li> <li>• New options added to the Repeats section in the Schedule tab of the Job Definition dialog box include: <ul style="list-style-type: none"> <li>• — Rerun same occurrence with custom start times (H:mm,H:mm) – When selected, you can enter a comma-separated list of job start times in the text box displayed. The start times indicate when the same job instance will run initially and will rerun.</li> </ul> <p>For example, if you enter “5:50,10:26,18:01” as custom start times, the job instance is scheduled to run first at 5:50 AM, then rerun at 10:26 AM, and finally rerun at 6:01 PM, for a total of three times. If the job runs past any start time in the list, that time is skipped, and the nearest future start time is used for the next rerun. If there are no future start times remaining for the production day, the job completes and does not rerun again. The job does not compile any instances if compiling for the current production day and all start times listed are in the past.</p> </li> </ul>

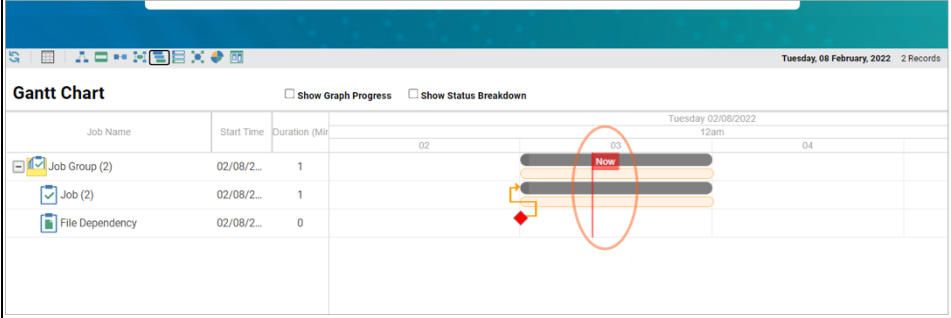
Feature	Description
	<ul style="list-style-type: none"> <li>• — Rerun same occurrence with Minutes after hours (mm,mm) – When selected, you can enter a comma-separated list of minute designations (ranging from 0 to 59) in the text box displayed. These minute designations indicate when the same job instance will run initially and will rerun.  For example, if you enter “25,35,45” minutes and the job’s time window starts at midnight, the job instance is scheduled to run first at 12:25 AM, and then rerun at 12:35 AM, 12:45 AM, 1:25 AM, 1:35 AM, 1:45 AM, and so on. If the job runs past any start time in the list, that time is skipped, and the nearest future start time is used for the next rerun. If there are no future start times remaining for the production day, the job completes and does not rerun again. The job does not compile any instances if compiling for the current production day and all start times listed are in the past.</li> <li>• — Run new occurrence with custom start times (H:mm,H:mm) – When selected, you can enter a comma-separated list of job start times in the text box displayed. The start times indicate when a new instance of the job will run. For example, if you enter “5:50,10:26,18:01” as custom start times, a new job instance will be scheduled to run at 5:50 AM, 10:26 AM, and 6:01 PM.</li> <li>• — Run new occurrence with Minutes after hour (mm,mm) – When selected, you can enter a comma-separated list of minute designations (ranging from 0 to 59) in the text box displayed. These minute designations indicate when a new job instance will run. For example, if you enter “25,35,45” minutes and the job’s time window starts at midnight, a new job instance is scheduled to run at 12:25 AM, 12:35 AM, 12:45 AM, 1:25 AM, 1:35 AM, 1:45 AM, and so on.</li> <li>• These options were removed from the Repeats section on the Schedule tab of the Job Definition dialog box: <ul style="list-style-type: none"> <li>• — custom start times (H:mm,H:mm)</li> <li>• — Minutes after hour (mm,mm)</li> </ul> </li> <li>• These options, which allow you to increase or decrease the job priority, now appear in the Options tab of the Job Definition dialog box. Once jobs enter the Ready state, job priorities can be increased or decreased by one point every X minutes. <ul style="list-style-type: none"> <li>• — Increase – Increases the job priority every X minutes.</li> <li>• — Decrease – Decreases the job priority every X minutes.</li> </ul> </li> </ul> <p>Also, a new Reset button appears next to the Priority field in the Override tab of the Job Details dialog box. When selected, the job priority reverts to the value specified in the job definition.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 3 – Users</li> <li>• Tidal Automation User Guide – Chapter 4 – Job Activity</li> <li>• Tidal Automation User Guide – Chapter 5 – Jobs and Job Groups</li> </ul> <p>Tidal Automation REST API Reference Guide – Chapter 6 – Job</p>
<b>Job Dependency Enhancements</b>	<p>The default for Ignore dependency if job not in schedule option now appears in the Activities &gt; System Configuration &gt; Defaults tab.</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 2 — Getting Started</li> </ul>



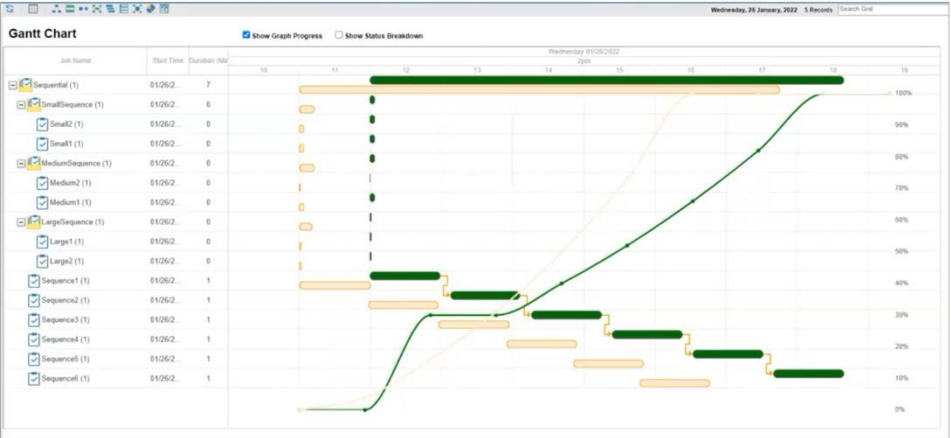
Feature	Description
	Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups

<h3>Job Events Enhancements</h3>	<ol style="list-style-type: none"> <li>The following settings have been added to the Activities &gt; System Configuration &gt; System tab for Workgroups: <ul style="list-style-type: none"> <li>A new Use Occurrence Failure Count option, added to the Event Parameter dialog box of the Rerun function, configures the rerun action so that it uses the job occurrence failure count and ignores job definition max reruns. The label changes to Maximum Retries when you select the Use Occurrence Failure Count option, which denotes the number of retries.</li> <li>The failure count increases each time the job is aborted, completes abnormally, or an error occurs during the jobrun. The failure count resets when the job is successfully completed. As part of this enhancement, the Delay on rerun label on the Event Parameter dialog box for the Rerun action has been renamed to Delay.</li> </ul> </li> </ol> <p>For more information, see: Tidal Automation User Guide — Chapter 7 — Events</p>
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<h3>Business Views / Graphical Views Enhancements</h3>	<p>The Gantt Chart diagram has been enhanced to give users more visibility into their runtime environment. The new Gantt Chart diagram contains two panels:</p> <ul style="list-style-type: none"> <li>A left panel with a grid showing the Job Name, Start Time, and the Duration (in minutes).</li> <li>The right panel contains columns that represent job processing from the start of the first job through the end of the last job in the job group.</li> </ul> <p>Horizontal bars represent job duration in this panel. Two distinct stacked bars illustrate the: 1) estimated duration and 2) the actual duration of the job.</p> <ul style="list-style-type: none"> <li>— The top bar represents the actual duration of time elapsed.</li> <li>— The bottom, lighter-colored bar represents the baseline - estimated start and end time durations for each job.</li> </ul> <p>If the current time falls within the timeline, a Now flag shows the current time in relation to the amount of time already elapsed and the amount of time remaining for both bars shown.</p>
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The following two options appear near the top of the Gantt Chart diagram:

Feature	Description
	<p>• <b>Show Graph Progress</b> — Displays a line graph overlay on top of the existing diagram so that you can see a comparison between estimated and actual duration. Two lines appear to graph the estimated/baseline and actual progress of the jobs. The line color of the actual duration reflects the users chosen color for completed jobs. See the image below where actual jobs are yet to complete.</p>  <p>• <b>Show Status Breakdown</b> — Displays a pie chart of job statuses shown in the timeline. The number shown on the outside of the pie chart is the unit (in seconds) of the timeline that applies to that section of the pie chart.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 8 – Business Views / Graphical Views</li> <li>• Tidal Automation User Guide – Chapter 10 – Business Activity</li> <li>• Tidal Automation User Guide – Chapter 11 – SLA Activity</li> </ul> <p>Tidal Automation User Guide – Chapter 12 – Queue Activity</p>
<p><b>Dashboard Enhancements</b></p>	<p>The TA Dashboard supports creation, modification, and deletion of Sites. A Site contains multiple Dashboard pages which in turn contain multiple Dashboard widgets (Dashboard Elements).</p> <p>For more information, see: Tidal Automation Dashboard User Guide</p>
<p><b>Default Domain Configuration</b></p>	<p>The master.props and clientmgr.props files now contain a new property, ActiveDirectory.DefaultDomain that specifies the Active Directory domain name. This domain name is prefixed to the username so that during the sign-on process, users can enter their username without prefixing a domain string.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 16 – Parameters</li> </ul> <p>Tidal Automation Installation Guide – Chapter 14 – Basic TA Configuration</p>

Feature	Description
<p><b>Notification for Unread Messages</b></p>	<p>A new Configure Unread Message Count option now appears in the Operations &gt; Master Status context menu in the TA Web Client. Use this option to display the Configure Unread Message Count dialog box that contains the following options. Select one or more of these options so that the unread messages count appears next to the Operations &gt; Master Status in the TA Web Client.</p> <ul style="list-style-type: none"> <li>• Show Unread System Message Count</li> <li>• Show Unread User Message Count</li> <li>• Show Unread Broadcast Message Count</li> </ul> <p>For more information, see Chapter 14 – Monitoring Production in the Tidal Automation User Guide.</p>
<p><b>Validation Policies for Job Groups</b></p>	<p>Select the new Enforce Job validation policy on Job Group objects setting added to the Activities &gt; System Configuration &gt; System tab to enforce the Validation policies defined for Job objects on Job Group objects.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 2 – Getting Started</li> <li>• Tidal Automation User Guide – Chapter 3 – Users</li> </ul>
<p><b>Where Used Functionality for Local Group Variables</b></p>	<p>To view the Jobs and Job Groups where local group variables are used, right-click a local group variable from the Variables tab in the Job Group Definition dialog box and select the new Where Used context menu option.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 4 – Job Activity</li> <li>• Tidal Automation User Guide – Chapter 5 – Jobs and Job Groups</li> </ul>
<p><b>Support for Security/Authorization Policies Evaluation for Impersonated Users</b></p>	<p>This enhancement supports evaluation of Authorization Policies and/or Security Policies associated with LDAP Groups of a user being impersonated. To enable this enhancement, configure TA to query the Active Directory or LDAP server either anonymously or by using a Bind User.</p>
<p><b>Proxy Authentication for Apache Airflow and ServiceNow Adapters</b></p>	<p>In addition to the Webservice Adapter, TA supports proxy authentication for Apache Airflow and ServiceNow Adapters.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation Adapter for Apache Airflow Guide – Chapter 2 – Configuring an Adapter</li> </ul>

Feature	Description								
	<ul style="list-style-type: none"> <li>Tidal Automation Adapter for ServiceNow Information Technology Service Management (ITSM) Guide – Chapter 2 – Using the Adapter</li> </ul>								
<p>Support for Kerberos Authentication for Microsoft SQL Server Adapter</p>	<p>Tidal Automation supports Kerberos authentication for the Tidal Automation Adapter for Microsoft SQL Server. To define a Microsoft SQL Server connection using Kerberos authentication, select the Kerberos Authentication checkbox in the MSSql Connection tab, which is enabled when you select the Use Windows Authenticate checkbox. Optionally, specify a value in the Realm field.</p> <p>The JVMARGS property has been added to the adapter’s service.props file to specify the default realm and the Key Distribution Center(KDC) for the realm in the krb5.conf configuration file for Kerberos.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation Adapter for Microsoft SQL Server Guide – Chapter 2– Configuring the Adapter</li> </ul> <p>Tidal Automation Adapter for Microsoft SQL Server Guide – Chapter 6 – Configuring service.props</p>								
<p>Support for Amazon RDS for PostgreSQL</p>	<p>Starting with TA Rel 6.5.10, Tidal Automation supports Amazon Relational Database Service (RDS) for the PostgreSQL database. For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation Installation Guide – Chapter 3 – Installing the TA Master for Windows</li> <li>Tidal Automation Installation Guide – Chapter 4 – Installing the TA Master for Unix</li> </ul> <p>Tidal Automation Installation Guide – Chapter 5 – Installing the Client Manager</p>								
<p>View Permission for Unavailable Connections</p>	<p>Users with permission to view connections can only view unavailable connections in the Master Status &gt; Connections tab.</p> <p>For more information, see: Tidal Automation User Guide – Chapter 14 – Monitoring Production</p>								
<p>Compatibility Updates</p>	<table border="1"> <thead> <tr> <th colspan="2">Table 1 Compatibility Updates</th> </tr> <tr> <th>Compatibility Item</th> <th>Supported for</th> </tr> </thead> <tbody> <tr> <td>Oracle 21c</td> <td>TA Master, Client Manager, and Agent</td> </tr> <tr> <td>SAP BOBI 4.3 SP2</td> <td>Tidal Automation Adapter for SAP BusinessObjects Business Intelligence (</td> </tr> </tbody> </table>	Table 1 Compatibility Updates		Compatibility Item	Supported for	Oracle 21c	TA Master, Client Manager, and Agent	SAP BOBI 4.3 SP2	Tidal Automation Adapter for SAP BusinessObjects Business Intelligence (
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Compatibility Item	Supported for								
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<p>@version 6.5.11</p>	<p>*****</p>								
<p>System Defaults for Terminator Job Options</p>	<p>The defaults for Terminator job-related options for both jobs and job groups now appear in the Activities &gt; System Configuration &gt; Defaults tab.</p> <ul style="list-style-type: none"> <li>Terminate parent on: Error, Abnormal completion, and Abort</li> <li>On Terminate request (job): Ignore and Abort if active</li> </ul>								

Feature	Description
	<ul style="list-style-type: none"> <li>On Terminate request (job group): Ignore and Terminate parent For more information, see: Tidal Automation User Guide — Chapter 2 — Getting Started</li> </ul>
<h2>Job Event Enhancements</h2>	<ul style="list-style-type: none"> <li>The following job event triggers appear in the Event Trigger dropdown list in the Job Event Definition dialog box: <ul style="list-style-type: none"> <li>— Job status is Timed Out – This event is triggered when the job status changes to Timed Out for a job missing its date and time window.</li> <li>— Job status is Timed Out For Day – This event is triggered when the job status changes to Timed Out For Day for a job missing its date and time window for the day.</li> <li>— Job waiting in queue longer than expected – This event is triggered when the job waits in the queue longer than the specified maximum wait time.</li> </ul> <p>The job waits in the queue when the job has reached one of the following statuses: Agent Disabled, Agent Unavailable, Agent Outage, Terminate Ready, or Waiting on Resource.</p> <p>Note: This event may not be triggered if the TA Master restarts or fails over while the job waits in the queue. For more information, see: Tidal Automation User Guide — Chapter 8 — Events</p> </li> <li>The following two new options now appear in the Activities &gt; System Configuration &gt; Other tab: <ul style="list-style-type: none"> <li>— Wait... seconds before raising the "Job waiting in queue longer than expected" event – Specifies the maximum wait time before TA triggers the Job waiting in queue longer than expected event. To override this value, specify a custom time duration in the Options tab of the Job Event Definition dialog box.</li> <li>— Wait... seconds before raising the "Job in launch status longer than expected" event – Specifies the maximum wait time before TA triggers the Job in launch status longer than expected event. To override this value, specify a custom time duration in the Options tab of the Job Event Definition dialog box.</li> </ul> <p>By default, the Wait... seconds before raising the "Job in launch status longer than expected" event field displays 300 seconds. When the TA Master starts for the first time after upgrading to TA Rel 6.5.11, any existing wait time duration configured in sysval 159 is converted from minutes to seconds and is displayed in the Wait... seconds before raising the "Job in launch status longer than expected" event field.</p> <p>After the upgrade to TA Rel 6.5.11, any modification to sysval 159 is ignored; the sysval becomes obsolete. For more information, see: Tidal Automation User Guide — Chapter 2 — Getting Started</p> </li> </ul>
<h2>Job Dependency Enhancements</h2>	<p>If you are using a TA version earlier than TA Rel 6.5.10 or TA Rel 6.5.11 to build a jobrun's ancestry by selecting the Relative to specified group in job activity (otherwise, for day) field in the Job Dependency Definition dialog box, you may receive an <i>ArrayIndexOutOfBoundsException</i> message.</p>

Feature	Description
	<p>This message is caused by the compiler finding that the job's parent has no ancestry. Ensure that you recompile future schedules. If required, you may need to upgrade to TA Rel 6.5.10 or TA Rel 6.5.11 from your current TA version (if it is older than TA Rel 6.5.10). In such case, you must recompile schedules.</p> <p>WARNING: You must recompile schedules, after the TA Rel 6.5.10 upgrade or later, even if the <i>ArrayIndexOutOfBoundsException</i> is not thrown. Failing to recompile causes the Relative to specified group in job activity (otherwise, for day) feature to become unstable.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 5 – Jobs and Job Groups</li> <li>• Tidal Automation Installation Guide – Chapter 17 – Upgrading Components</li> </ul>
<h2>Job and Job Group Enhancements</h2>	<ul style="list-style-type: none"> <li>• Similar to jobs, the Defer until normal and Defer until complete options appear in the If job is currently running dropdown list on the Options tab of the Job Group Definition dialog box.</li> <li>• The existing Variable Value text field in both the Local Job Variable and Local Group Variable dialog boxes, which are displayed when adding or editing a variable from the Variables tab in the Job Definition or Job Group Definition dialog box, has been modified to a text area to accommodate multi-line text of the variable value.</li> </ul> <p>Use this new text area to edit a variable value in one of the following ways:</p> <ul style="list-style-type: none"> <li>• — Click on the variable value text area and modify the grid. The text area is located in the Local Job Variables grid on the Variables tab of the Job Definition dialog box.</li> <li>• — Click the Edit button located on the Variables tab in the Job Definition dialog box. Modify the value on the Local Job Variable dialog box.</li> <li>• — Click on the variable value text area and modify the value. The text area is located on the Local Group Variables grid on the Variables tab of the Job Definition dialog box.</li> <li>• — Click the Edit button on the Variables tab in the Job Group Definition dialog box. Modify the value on the Local Group Variable dialog box. This new variable value text area appears in the following TA screens: <ul style="list-style-type: none"> <li>• — Variables tab in the Job Definition or Job Group Definition dialog box.</li> <li>• — Local Job Variable dialog box that appears by selecting Add or Edit in the Variables tab of the Job Definition dialog box.</li> </ul> </li> <li>• — Local Group Variable dialog box that appears by selecting Add or Edit in the Variables tab of the Job Group Definition dialog box.</li> <li>• — Insert Job into Schedule dialog box.</li> <li>• — Variables tab in the Job Details dialog box for Jobs and Job Groups.</li> </ul>

Feature	Description
	<ul style="list-style-type: none"> <li>• — Local Job Variable dialog box that appears by selecting Add or Edit in the Variables tab of the Job Details dialog box for Jobs.</li> <li>• — Local Group Variable dialog box that appears by selecting Add or Edit in the Variables tab of the Job Details dialog box for Job Groups.</li> </ul> <p>• The Job Rule Filter dialog box contains these fields added in this release.</p> <p>— Agent List - Filters all jobs or job groups associated with the agent list selected from this dropdown list. By default, all available agent lists are displayed in this field. If no agent list is selected, all available agent lists are considered during the job filtering.</p> <p>— Include indirect usage of Agent List - Filters all jobs or job groups associated with the agent list you choose from the Agent List dropdown list. Also filters all job or job groups associated with the parent agent lists for the selected agent list in the Agent List dropdown list.</p> <p>— Include indirect usage of Agent - Filters all jobs or job groups that run on the agent you choose from the Agent dropdown list. Also filters all jobs or job groups associated with the agent lists that directly or indirectly contain the selected agent in the Agent dropdown list.</p> <p>For more information, see:</p> <p>Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</p>
<h2>Job and Job Run Enhancements</h2>	<p>The following Job and JobRun enhancements are added in this release:</p> <ul style="list-style-type: none"> <li>• The Insert Job into Schedule dialog box now includes the Require Operator Release option which you can use when inserting jobs.</li> </ul> <p>Also, a new waitop parameter has been added to the:</p> <ul style="list-style-type: none"> <li>• — insert method for Job and Job Run API objects.</li> <li>• — insertWaitForID method for Job API object.</li> </ul> <ul style="list-style-type: none"> <li>• A new job status, Unrecoverable, is available for jobs and job groups. A job group is set to Unrecoverable if any of its child jobs have a status of Unrecoverable.</li> <li>• If you don't have a valid license for Data Mover job operations (i.e., create, update, copy, and insert into the schedule) using Azure Blob protocol, Tidal disables the resulting jobs, by default, and displays these jobs when the jobs are enabled.</li> </ul> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</li> <li>• Tidal Automation User Guide — Chapter 16 — Event ID Tables</li> <li>• Tidal Automation REST API Reference Guide — Chapter 6 — Job</li> <li>• Tidal Automation REST API Reference Guide — Chapter 9 — JobRun</li> </ul>

Feature	Description
<p><b>Web Service Adapter Connection and Job Enhancements</b></p>	<p>In TA Rel 6.5.11, by default, if a WebService Adapter connection is lost and subsequently restored, the adapter sets the status of Orphaned jobs to Unrecoverable. In previous adapter service packs, Orphaned jobs were set to Completed Abnormally status. To reset the adapter status to that in earlier releases, specify the parameter OLDRECOVERYLOGIC=Y in the Configuration Parameters field on the Options tab of the WebService Adapter Connection Definition dialog box.</p> <p>For more information, see:</p> <p>Tidal Automation Adapter for Web Service Guide – Chapter 3 – Configuring the Adapter</p>
<p><b>Dashboard Enhancements</b></p>	<ul style="list-style-type: none"> <li>• Ability to use SLA Policy data in Dashboard – A new data type, SLA Activity, appears in the Dashboard Element dialog box. Choosing one or more of these SLA rules allows TA to filter Job Run search based on your selections and display the results in the Dashboard.</li> <li>• Ability to use SLA History Status data in Dashboard – In the Dashboard Element dialog box, select the SLA Activity data type to enable a list of SLA History statuses in the lower portion of the dialog box. By selecting one or more of these statuses, the Job Run search is filtered based on your selections and the results are displayed in the Dashboard.</li> </ul> <p>For more information, see:</p> <p>Tidal Automation Dashboard User Guide</p>
<p><b>Business Views / Graphical Views Enhancements</b></p>	<p>TA disables the Search Grid text box when displaying the Business View diagrams and Graphical View diagrams in the:</p> <ul style="list-style-type: none"> <li>• Job Activity pane (Business View diagram)</li> <li>• Job Activity pane (Graphical View diagrams)</li> <li>• Queue Activity pane</li> <li>• Business Activity pane</li> <li>• SLA Activity pane</li> </ul> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 9 – Business Views / Graphical Views</p>
<p><b>System setting to display Date/Time for copied TA Objects</b></p>	<p>Note the Update Create Date/Time when copying objects option in the Activities &gt; System Configuration &gt; Other tab. When selected, TA creates a copy of an object with the original object’s creation date/time updated to the current date/time.</p> <p>When you do not select this option, TA creates a copy of an object, but does not update the creation date/time of the original object. The following fields and tables are affected in TA database:</p> <ul style="list-style-type: none"> <li>• jobmst_crttime field in the jobmst table</li> <li>• tagmst_crttime field in the tagmst table</li> <li>• slamst_crttime field in the slamst table</li> <li>• slarule_crttime field in the slarule table</li> </ul> <p>This enhancement applies to the following TA objects in this release:</p> <ul style="list-style-type: none"> <li>• Jobs</li> <li>• Tags</li> <li>• SLA Policies</li> </ul>



Feature	Description
	<ul style="list-style-type: none"> <li>SLA Rules</li> </ul> <p>For more information, see: Tidal Automation User Guide – Chapter 2 – Getting Started</p>
<p><b>System Events for Restored Connection for Adapters/Agents</b></p>	<p>The Event Trigger dropdown list, located in the Definitions &gt; Events &gt; System Event Definition dialog box, contains these system event triggers:</p> <ul style="list-style-type: none"> <li>Restored connection to agent/adaptor – Triggered when TA restores a lost connection to an agent/adaptor.</li> <li>Restored connection to Backup Master – Triggered when TA restores a lost connection to the Backup Master.</li> <li>Restored connection to Fault Monitor – Triggered when TA restores a lost connection to the Fault Monitor.</li> <li>Restored connection to Database – Triggered when TA restores a lost connection to the TA Database.</li> <li>Restored connection to Remote Master – Triggered when TA restores a lost connection to the Remote Master.</li> </ul> <p>In addition, the Activities &gt; System Configuration &gt; Other tab now contains a new option - Wait.....seconds for the connection to stabilize before raising the “Restored connection to agent/adaptor” event. This option specifies the delay interval, in seconds, before TA triggers the system event Restored connection to agent/adaptor upon restoration of the connection to an agent/adaptor.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation User Guide – Chapter 2 – Getting Started</li> <li>Tidal Automation User Guide – Chapter 16 – Event ID Tables</li> </ul>
<p><b>Special Characters in TA Object Names</b></p>	<p>TA allows the following special characters in Tag names, SLA Policy names, SLA Rule names, Authorization Policy names, Validation Policy names, and Shared Owner Policy names:</p> <ul style="list-style-type: none"> <li>Period (.)</li> <li>Colon (:)</li> <li>At the rate of (@)</li> <li>Angle brackets (&lt; and &gt;)</li> <li>Slash (/)</li> <li>Backslash (\)</li> <li>Comma (,)</li> </ul> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation User Guide – Chapter 3 – Users</li> <li>Tidal Automation User Guide – Chapter 10 – Controlling Production</li> </ul>

Feature	Description
<b>Events and Actions Enhancements</b>	<p>The following UI elements now appear in the Associated Action(s) tab of the Job Event Definition, System Event Definition, Variable Event Definition, and File Event Definition dialog boxes.</p> <ul style="list-style-type: none"> <li>• Search Grid text field – This field applies to both the Available Action(s) and Selected Action(s) in the Associated Action(s) tab. Use this field to locate available actions.</li> <li>• &lt;&lt; – Select this button to assign all actions to an event.</li> <li>• &gt;&gt; – Select this button to unassign all actions associated with an event.</li> </ul>
<b>System setting to handle pending actions with Inactive Adapters</b>	<p>A Do not trigger Action if Adapter connection is inactive option appears on the System Configuration &gt; Other tab. Selecting this option for an inactive adapter connection triggers the TA Master to dispose of any pending action that requires the adapter connection and displays the Unable to process event for inactive service audit log message.</p> <p>If you do not select this option, the TA Master continuously checks this inactive connection for an active connection status to attempt to complete pending actions.</p> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 2 – Getting Started</p>
<b>Support for importing Multiple Time zones for Jobs</b>	<p>Use the new Import button on the System Configuration &gt; Timezone tab to simultaneously add multiple timezones for jobs. For more information, see:</p> <p>Tidal Automation User Guide – Chapter 2 – Getting Started</p>
<b>Usage of Oracle Thin Client in TA Installation</b>	<p>The Oracle thin client is no longer used when installing TA components.</p>
<b>OAuth 2.0 Authentication for sending Emails</b>	<p>Tidal Automation supports OAuth 2.0 authentication using either username/password or client credentials for sending emails. For more information, see:</p> <p>Tidal Automation User Guide – Chapter 2 – Getting Started</p>
<b>Notification of major system error messages in the TA Web Client Banner</b>	<p>TA can notify users of major system error messages. When the errors occur, the major system error messages selected in the new Activities &gt; System Configuration &gt; User Notification tab are displayed in the TA Web Client banner for a default duration of 30 seconds or until the TA Web Client is automatically refreshed.</p> <p>The error messages are also displayed in the Operations &gt; Master Status &gt; Messages tab. You must have the View Master Status security function to view these error messages.</p> <p>If you select the Allow users to override the notification preferences checkbox in the Activities &gt; System Configuration &gt; User Notification tab, you can override notification</p>

Feature	Description
	<p>preferences from Operations &gt; Master Status &gt; Preferences context menu &gt; Notification Preferences dialog box.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 2 – Getting Started</li> <li>• Tidal Automation User Guide – Chapter 15 – Monitoring Production</li> </ul>
<p><b>Support for TLS v1.3 Protocol in the TA Client Manager</b></p>	<p>TA supports TLS v1.3 protocol in the TA Client Manager. The location where the Client Manager is installed requires Java 1.8 (Java 1.8.261 or higher) or Java 11.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 17 – Parameters</li> <li>• Tidal Automation Installation Guide – Chapter 5 – Installing the Client Manager</li> </ul>
<p><b>Support for OAuth 2.0 Authentication for ServiceNow Adapter Connection</b></p>	<p>With the addition of OAuth 2.0 to the Authentication field on the ServiceNow tab in the ServiceNow Adapter Connection dialog box, TA now supports OAuth 2.0 authentication for Tidal Automation Adapter for ServiceNow ITSM connections.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation Adapter for ServiceNow ITSM Guide – Chapter 3 – Using the Adapter</li> <li>• Tidal Automation Adapter for ServiceNow ITSM Guide – Chapter 5 – Reference: Adapter User Interface</li> </ul>
<p><b>Access Control List for non-Admin Users to access ServiceNow</b></p>	<p>Non-Admin TA users that can schedule ServiceNow Adapter jobs can access a ServiceNow instance and can insert or update incident tickets in ServiceNow using one of the following user roles:</p> <ul style="list-style-type: none"> <li>• personalize_dictionary – Provides access to system tables sys_db_object and sys_dictionary.</li> <li>• personalize_decision_table_input – Provides access to system table sys_choice.</li> <li>• incident_manager – Provides read/write access to incident tables.</li> </ul> <p>Alternatively, instead of incident_manager, you can create your ACL (Access Control List) that allows you to create or updated incidents in the incident table.</p> <p>For information, see:</p> <p>Tidal Automation Adapter for ServiceNow ITSM Guide – Chapter 1 – Introducing the Adapter</p>

Feature	Description								
<p>Digital Signature for TA Components</p>									
<p>Compatibility Updates</p>	<p>The following table provides the compatibility items supported in this release.</p> <p><b>Table 1    Compatibility Updates</b></p> <table border="1"> <thead> <tr> <th>Compatibility Item</th> <th>Supported for</th> </tr> </thead> <tbody> <tr> <td>Oracle Autonomous Database</td> <td>TA Master</td> </tr> <tr> <td>SAP S/4HANA 2021</td> <td>Tidal Automation Adapter for SAP Java</td> </tr> <tr> <td>Oracle Database version 21c</td> <td>TA Master, Client Manager</td> </tr> </tbody> </table>	Compatibility Item	Supported for	Oracle Autonomous Database	TA Master	SAP S/4HANA 2021	Tidal Automation Adapter for SAP Java	Oracle Database version 21c	TA Master, Client Manager
Compatibility Item	Supported for								
Oracle Autonomous Database	TA Master								
SAP S/4HANA 2021	Tidal Automation Adapter for SAP Java								
Oracle Database version 21c	TA Master, Client Manager								
<p>Vulnerabilities</p>	<p>For information about the security vulnerabilities reviewed in the Summer 2022 release, see Tidal Software – CVEs Reviewed in 2022 in the Support Portal.</p>								
<p>@version 6.5.12</p>	<p>*****</p>								
<p>Milestone Job</p>	<p>A Milestone job is a no-operation job that does not use any agent or virtual resource but supports dependencies and triggers job events. Milestone jobs can help manage a stream of job dependencies by acting as logical points at which all upstream jobs are completed and downstream jobs are then allowed to run.</p> <p>For example, you have one set of jobs. All jobs in the first set must complete before you can run a second set of jobs. Instead of managing the individual dependencies inherent in each job in the second job set depending on each job in the first job set, you can create a Milestone job. The Milestone job would depend on the first set of jobs. The second set of jobs would depend on the Milestone job.</p> <p>Milestone jobs:</p> <ul style="list-style-type: none"> <li>• Do not wait on resources and do not need any command or parameter to execute successfully.</li> <li>• Go to Active status immediately after these jobs are launched.</li> </ul>								

Feature	Description
	<ul style="list-style-type: none"> <li>Always complete normally once the job dependencies are met. For more information, see: Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</li> </ul>
<b>Job and Job Group Enhancements</b>	<p>The following job and job group enhancements are added in the release:</p> <ul style="list-style-type: none"> <li>The new process directive \$C(PROCESS) implemented in this release tells the job compiler how to apply the VARINCLUDE or VAREXCLUDE and the FOLLOW directives to groups and non-group jobs.</li> <li>The Enabled dropdown list in the Job Rule Filter dialog box for jobs has been modified to a checkbox. For more information, see: Tidal Automation User Guide — Chapter 5 — Jobs and Job Groups</li> </ul>
<b>JobRun Enhancements</b>	<p>The following jobrun enhancements are added to this release:</p> <ul style="list-style-type: none"> <li>You can revert a job group instance that is in the Cancel Pending state to its previous state. When you revert a job group that is  in the Cancel Pending state, it reverts to one of the following states: <ul style="list-style-type: none"> <li>— Scheduled: If the jobs and job groups are in a future day schedule.</li> <li>— Active or Waiting on Dependencies: If the jobs and job groups are in current day schedule.</li> </ul> <p>As part of this enhancement, the:</p> <ul style="list-style-type: none"> <li>— Revert to Scheduled option appears in the Job Control context menu for the job and job group instances with the Cancel Pending status.</li> <li>— Revert All Cancelled Children to Scheduled option appears in the Child Job Control context menu for the job group instances with the Cancel Pending status.</li> </ul> <p>If you select the Revert All Cancelled Children to Scheduled option, TA reverts all jobs with the Cancelled, Terminated, and Cancel Pending status to the schedule.</p> </li> <li>The Job Activity &gt; Job Filter dialog box contains these fields added in this release: <ul style="list-style-type: none"> <li>— Agent List - Filters all jobs or job groups associated with the agent list selected from this dropdown list. By default, this field displays all available agent lists. All available agent lists are considered during the job filtering if no agent list is selected.</li> <li>— Include indirect usage of Agent List - Filters all jobs or job groups associated with the agent list you choose from the Agent List dropdown list. It also filters all job or job groups related to parent agent lists for the selected agent list in the Agent List dropdown.</li> <li>— Include indirect usage of Agent - Filters all jobs or job groups that run on the agent you choose from the Agent dropdown list. It also filters all jobs or job groups associated with the agent lists that directly or indirectly contain the selected agent in the Agent dropdown list.</li> </ul> </li> </ul>

Feature	Description
	<p>The Job Activity pane now contains a new Agent List column. For more information, see: Tidal Automation User Guide – Chapter 4 – Job Activity</p>
<p><b>Agent List Enhancements</b></p>	<p>The following Agent List enhancements are added in TA 6.5.12:</p> <ul style="list-style-type: none"> <li>• Ordering of Child Agent Lists – When defining an Agent List, TA supports the ordering of selected child Agent Lists, starting in this release.</li> <li>• Cascade Parent Agent List Type to Child Lists – A new Automatically cascade list type changes to all child lists option appears on the Activities &gt; System Configuration &gt; System tab. Selected by default, this option allows TA to modify the list type of child Agent Lists to that of the parent Agent List.</li> </ul> <p>To cascade a parent Agent List type to its child Agent Lists only when required, uncheck the Automatically cascade list type changes to all child lists option and use the Cascade List Type context menu option for this parent agent list from the Agent Lists pane.</p> <p>Note: The Cascade List Type context menu option does not appear for the Broadcast agent list type. For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation User Guide — Chapter 2 — Getting Started</li> <li>• Tidal Automation User Guide — Chapter 10 — Controlling Production</li> </ul>
<p><b>Security Enhancements for Jobs</b></p>	<p>By default, users can override the job parameters when inserting the job into the schedule. Change the default behavior by assigning the new Administration &gt; Security Policies &gt; Job Control &gt; Adhoc Job Deny Parameter Override security function. By enabling the function for the user, the Parameters field becomes read-only, thus preventing the user from overriding the job parameters.</p> <p>The existing Override option in the Job Control security function has been changed to Override Dependencies. For more information, see: Tidal Automation User Guide — Chapter 2 — Getting Started</p>
<p><b>User Enhancements</b></p>	<p>A new User Landing Page field with the following options now appears on the User Definition dialog box for interactive users.</p> <ul style="list-style-type: none"> <li>• Expert UI – Select this option to display the TA Web Client.</li> <li>• Dashboard – Select this option to display the TA Dashboard. For more information, see:</li> </ul> <p>Tidal Automation User Guide – Chapter 3 – Users</p>
<p><b>SAP Calendar Import Tool</b></p>	<p>The SAP Calendar Import Tool reads the factory calendars in SAP, extracts the data from these calendars, and imports the data into Tidal Automation. For more information about the tool, see its README.txt file.</p> <p>For more information, see: Tidal Automation Adapter for SAP – Chapter 1 – Introduction</p>

Feature	Description
<p>Support for Java 17</p>	<p>Beginning with the 2022 Fall release, the Tidal platform will be built to run with Java 17. Oracle's general support for Java 8 ended in March 2022. For more information, see <a href="#">Oracle Java SE Support Roadmap</a>.</p> <p>For the 2022 Fall release, downloads of Tidal Automation (TA), Tidal Explorer (TE), Tidal Repository (TR), APM Data Stream, and the Tidal adapters will require a Java 17 Java Runtime Environment (JRE) or Java Developer Kit (JDK). Customers who are still running Java 8 or Java 11 on their Tidal servers can contact the Tidal Support Center for links to compatible versions of TA, TE, TR, APM, and Tidal adapters. Hot fixes will also be available.</p> <p>Tidal intends to maintain Java 8 support through year-end 2023; however, this may change if CVEs identified in 3rd-party libraries used by Tidal stop supporting Java 8. Agents will continue to support Java 8 and later LTS versions of Java.</p> <p>Note: To use the Tidal Automation Adapter for JD Edwards in a TA environment configured to run on Java 17, add the parameter below in the service.props file located in the &lt;Adapter GUID&gt;\config folder for the adapter. Restart the TA Master for the configuration to take effect.</p> <pre>JVMARGS=--add-opens=java.xml/com.sun.org.apache.xalan.internal.xsltc.trax=ALL-UNNAMED</pre>
<p>Support for Oracle Autonomous Database</p>	<p>TA allows users to connect to the Oracle® Autonomous Database during Master and the Client Manager installation on both the Windows and Linux platforms.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>• Tidal Automation Installation Guide – Chapter 3 – Installing the TA Master for Windows</li> <li>• Tidal Automation Installation Guide – Chapter 4 – Installing the TA Master for Unix</li> <li>• Tidal Automation Installation Guide – Chapter 5 – Installing the Client Manager</li> </ul>
<p>Calendar Enhancements</p>	<p>You can turn on or turn off the Calendar object's Recalculate functionality by defining the new flag compilenow in the create and update methods for the Calendar, CalendarChild, CalendarCondition, and FiscalCalendar API objects. If this flag is not defined or null or set to Y, TA raises a compile request to the Compile Manager. If the flag is set to N, TA does not raise a compile request.</p> <p>For more information, see: Tidal Automation REST API Reference Guide – Appendix A — REST API Object Descriptions</p>
<p>OS400 Adapter Job Enhancements</p>	<p>The Tidal Automation Adapter for OS400 features two new tabs, Pre Execution and Post Execution, on the OS400 tab of the Job Definition dialog box. These tabs specify commands that, when executed, will complete Tidal Automation Adapter for OS400 jobs normally.</p> <p>For more information, see: Tidal Automation Adapter for OS400 Guide – Chapter 3 – Working with OS/400 Jobs</p>
<p>JMS Adapter Job Enhancements</p>	<p>You can add, edit, and delete message properties when defining the JMS job for sending messages (using the Send Message task type) to the JMS server. These message properties and the message header are included in the JMS job output if you have selected the Include header and properties in the job output option in the JMS job definition for monitoring JMS messages (using the Sink Message task type).</p>

Feature	Description				
	<p>For more information, see: Tidal Automation Adapter for JMS Guide – Chapter 2 – Defining JMS Jobs</p>				
<p>Compatibility Updates</p>	<p>The following table provides the compatibility items supported in this release.</p> <p><b>Table 1    Compatibility Updates</b></p> <table border="1" data-bbox="506 527 1430 604"> <thead> <tr> <th data-bbox="506 527 927 562">Compatibility Item</th> <th data-bbox="927 527 1430 562">Supported for</th> </tr> </thead> <tbody> <tr> <td data-bbox="506 562 927 604">Azure Data Lake Storage (ADLS) Gen 2</td> <td data-bbox="927 562 1430 604">Tidal Automation Adapter for Azure Blob Storage</td> </tr> </tbody> </table>	Compatibility Item	Supported for	Azure Data Lake Storage (ADLS) Gen 2	Tidal Automation Adapter for Azure Blob Storage
Compatibility Item	Supported for				
Azure Data Lake Storage (ADLS) Gen 2	Tidal Automation Adapter for Azure Blob Storage				
<p>Vulnerabilities</p>	<p>For information about the security vulnerabilities reviewed in the Fall 2022 release, see Tidal Software – CVEs Reviewed in 2022 in the Support Portal.</p>				
<p>@version 6.5.13</p>	<p>*****</p>				
<p>Jobs and Job Group Enhancements</p>	<ul style="list-style-type: none"> <li>• Starting with TA 6.5.13, when inserting the selected jobs and job groups into the schedule, select the Insertasabatch option in the InsertJob into Schedule dialog to make sure that: <ul style="list-style-type: none"> <li>— The predecessor jobs are inserted into the schedule before the successor jobs.</li> <li>— A job is only inserted if the job's parent is not part of the selection.</li> </ul> </li> </ul> <p>Note: The Insert as a batch option is disabled when you insert a single job or a job group. For more information, see:</p> <p>Tidal Automation User Guide – Chapter 5 – Jobs and Job Groups</p> <ul style="list-style-type: none"> <li>• A new Exclusive Use checkbox now appears on the Job Definition dialog or Job Group Definition dialog &gt; Resources tab &gt; Add or Edit &gt; Resource Requirement Definition dialog.</li> </ul> <p>Select this checkbox if you want the job to have an exclusive lock such that no other job can simultaneously use any quantity of the selected resource. As part of this enhancement:</p> <ul style="list-style-type: none"> <li>— A new column, Exclusive Use, appears in the: <ul style="list-style-type: none"> <li>— Virtual Resources grid on the Job Definition dialog or Job Group Definition dialog &gt; Resources tab.</li> <li>— Virtual Resource Definition dialog &gt; Jobs tab.</li> </ul> </li> </ul> <p>This column displays Yes if you select the Exclusive Use checkbox on the Job Definition dialog or Job Group Definition dialog &gt; Resources tab &gt; Add or Edit &gt; Resource Requirement Definition dialog; displays No if you do not select the Exclusive Use check box.</p>				



Feature	Description
	<p>— The In Use column on the Job Definition dialog or Job Group Definition dialog &gt; Resources tab displays the value Exclusive, if a single job exclusively uses the resource. Otherwise, the column indicates how much of the resource's limit is used.</p> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 5 - Jobs and Job Groups</p> <ul style="list-style-type: none"> <li>• A job or job group that you insert into the production schedule runs immediately irrespective of the time zone specified for the job or job group when you: <ul style="list-style-type: none"> <li>— Specify a Date that is the same as the Master Production Date.</li> <li>— Do not specify the From time and Until time.</li> </ul> </li> </ul> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 5 – Jobs and Job Groups</p> <p>A new system setting, Automatically delete all unrun Ad hoc Job instances whenever the Job Definition has been updated appears on the Activities &gt; System Configuration &gt; System tab. Selecting this checkbox ensures the deletion of all unrun ad hoc job occurrences from the schedule when you modify or disable these jobs.</p> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 2 – Getting Started</p>
<p><b>Job Run Enhancements</b></p>	<p>Starting with TA Rel 6.5.13, Tidal Automation allows you to add jobruns dynamically to the PERT Diagram, Status Board, and Grouping Diagram using the new Add JobRun context menu option available for these diagrams. Use the search function on the Job Search dialog to search for any existing jobruns to add to these diagrams.</p> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 9 – Business Views / Graphical Views</p>
<p><b>Job Enhancements</b></p>	<p>These enhancements are added to the Job Rule Filter dialog:</p> <ul style="list-style-type: none"> <li>• The existing Enabled checkbox has been removed.</li> <li>• These three job status options are added: <ul style="list-style-type: none"> <li>— Enabled – Select this option to filter only the enabled jobs.</li> <li>— Disabled – Select this option to filter only the disabled jobs.</li> <li>— Both – Select this option to filter the jobs that are enabled and those that are disabled. This option is selected by default.</li> </ul> </li> </ul>

Feature	Description
<b>Resource Enhancements</b>	<p>These resource enhancements are added in TA 6.5.13:</p> <ul style="list-style-type: none"> <li>• To make all the virtual resources offline, select the new All Virtual Resources checkbox that appears on the Virtual Resource Definition dialog.</li> <li>• The In Use field on the Virtual Resource Definition dialog displays the value Exclusive if a single job exclusively uses the resource. Otherwise, the field indicates how much of the resource's limit is used.</li> <li>• The Locked column on the Virtual Resource Definition dialog &gt; Locked Virtual Resources tab displays: <ul style="list-style-type: none"> <li>— Exclusive for a job, if the job has an exclusive lock such that no other job can simultaneously use any quantity of the selected resource.</li> <li>— Exclusive Pending for a job, if the job is waiting in the queue to attain an exclusive lock on the resource once other jobs relinquish their assigned quantities of the resource.</li> </ul> </li> </ul> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 10 – Controlling Production</p>
<b>API Enhancements</b>	<p>The GeneralInfo API response has been updated with a new field &lt;tes:maxformcontentsize&gt;. Tidal Repository uses this field information to adjust its block size (chunks) during movement. By default, the movement limit is 200KB.</p> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 2 – Getting Started</p>
<b>Client Manager Enhancements</b>	<p>To turn off TLS hostname verification for ActiveMQ clients, set the new MessageBroker.SSL.ClientNode.verifyHostName property to false in the:</p> <ul style="list-style-type: none"> <li>• master.props file for the Primary Master, Backup Master, and Remote Master.</li> <li>• clientmgr.props file for the Client Manager.</li> <li>• &lt;Hostname or IP address&gt;-ssl.props file for Java Client. For more information, see: <ul style="list-style-type: none"> <li>• Tidal Automation User Guide – Chapter 17 – Parameters</li> <li>• Tidal Automation Installation Guide – Chapter 14 – Basic TA Configuration</li> </ul> </li> </ul>
<b>Calendar Enhancements</b>	<p>These holiday calendars are added to the Calendars object:</p> <ul style="list-style-type: none"> <li>• Argentina Calendars</li> <li>• Brazil Calendars</li> <li>• Chile Calendars</li> <li>• Japanese Calendars</li> <li>• Juneteenth Holiday Calendar</li> <li>• Mexican Calendars</li> </ul> <p>For more information, see:</p> <p>Tidal Automation User Guide – Chapter 10 – Controlling Production</p>
<b>Job Dependency Enhancements</b>	<p>These job dependency enhancements are added in Tidal Automation 6.5.13:</p> <ul style="list-style-type: none"> <li>• The Do not re-evaluate once job is Waiting on Resource option in the Job Dependency Definition dialog appears on the Activities</li> </ul>

Feature	Description
	<p>&gt; System Configuration &gt; Defaults tab. Selecting this option applies the setting to all job definitions in Tidal Automation.</p> <ul style="list-style-type: none"> <li>A new Cancel Override context menu option appears on the Dependencies tab of the Job Details dialog to cancel a job dependency override. If you selected the Confirm Dependency Override option on the Activities &gt; System Configuration &gt; Other tab, a confirmation alert is displayed when you click the Cancel Override option.</li> </ul> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation User Guide – Chapter 2 – Getting Started</li> <li>Tidal Automation User Guide – Chapter 4 – Job Activity</li> </ul>
<b>Variables Enhancements</b>	A new option, System Version, appears in the System Variables context menu of the Variables drop-down list to identify changes related to a specific version.
<b>Oracle Autonomous Database Support for Master Upgrade</b>	<p>Tidal Automation allows users to connect to the Oracle Autonomous database when upgrading the TA Master on both the Windows and UNIX/Linux environments.</p> <p>For more information, see: Tidal Automation Installation Guide – Chapter 17 – Upgrading Components</p>
<b>Support SAP ISU Jobs in Tidal Automation</b>	<p>A new Mass Activity job step has been added to the Add Step dropdown menu on the SAP Job Definition dialog &gt; SAP tab. The Mass activity programs process huge volumes of data quickly using parallel processes.</p> <p>For more information, see: Tidal Automation Adapter for SAP Guide – Chapter 2 – Defining SAP Jobs</p>
<b>Support for OCI Storage in S3 Adapter</b>	<p>Tidal Automation supports the OCI object storage for the Tidal Automation Adapter for S3. A new option, OCI Object Storage, appears in the Storage Type dropdown list on the S3 tab of the adapter’s Connection Definition dialog.</p> <p>For more information, see:</p> <ul style="list-style-type: none"> <li>Tidal Automation Adapter for S3 – Chapter 1 – Introducing the S3 Adapter</li> <li>Tidal Automation Adapter for S3 – Chapter 2 – Configuring the Adapter</li> <li>Tidal Automation Adapter for S3 – Chapter 3 – Using the Adapter</li> </ul>
<b>Support for Windows SSH Connection in S3 Adapter</b>	<p>To create a Windows SSH connection, add the OS_Type=Windows parameter to the Options tab on the Connection Definition dialog for the Tidal Automation Adapter for SSH.</p> <p>For more information, see: Tidal Automation Adapter for SSH – Chapter 2 – Configuring the SSH Adapter</p>
<b>Support for Java 17</b>	Starting with the 2023 Spring release, downloads of Tidal Automation (TA), Tidal Explorer (TE), Tidal Repository (TR), APM Data Stream, and the Tidal adapters will require a Java 17 Java Runtime Environment (JRE) or Java Developer Kit (JDK). Java 17 is the minimum required version to run Tidal Automation.

Feature	Description																
<p><b>Tidal Automation Adapters</b></p>	<p>These are the Tidal Automation Adapters released in Spring 2023.</p> <ul style="list-style-type: none"> <li>• Tidal Automation Adapter for Databricks Spark SQL - Integrates Tidal Automation with Databricks SQL and Apache Spark SQL so that you can create, schedule, and run Databricks Spark jobs through TA. See the Tidal Automation Adapter for Databricks Spark SQL Guide for more information.</li> <li>• Tidal Automation Adapter for Oracle Cloud Infrastructure Virtual Machines - Automates building, deploying, and managing instance/instance pool and capacity reservation for Oracle Cloud Infrastructure (OCI) Compute Virtual Machines that provide a secure and customizable compute service. See the Tidal Automation Adapter for OCI Virtual Machines Guide for more information.</li> </ul>																
<p><b>@version 6.5.14</b></p>	<p>*****</p>																
<p><b>Interface Enhancements</b></p>	<p>For your convenience, we improved the look and feel of the Administration, Log Filter, and Disaster Recovery Definition dialogs. And added the Check All option on the Log Filter dialog to select all options with just one click.</p>																
<p><b>Security Enhancement</b></p>	<p>We implemented the HSTS policy to protect data in transit and not to allow accidental disclosure.</p>																
<p><b>Job Enhancement</b></p>	<p>We changed the behavior when deleting the AgentList. Now the job with the missing jobdtl will be skipped when checking for jobruns associated with the AgentList that is getting deleted.</p>																
<p><b>Job Activity panel Enhancement</b></p>	<p>Job Control is now available in the Graphic Views.</p>																
<p><b>Security Policy panel Enhancement</b></p>	<p>We added a new category to the "Deny Access" security category. There is now a Denied Folder Create Access option. When it is enabled, the option to create a folder will be removed from the Security Policies right-click menu. The user won't be able to create this object via the API as well.</p>																
<p><b>API Enhancements</b></p>	<p>We removed the following API methods that don't have corresponding Master methods.</p> <table border="0"> <tr> <td>API Object</td> <td>Removed</td> </tr> <tr> <td>EventActionRun</td> <td>Copy, Create, Update, Enable</td> </tr> <tr> <td>FMLog</td> <td>Copy, Create, Update, Delete</td> </tr> <tr> <td>InterMasterVariable</td> <td>Enable</td> </tr> <tr> <td>JobReport</td> <td>Enable</td> </tr> <tr> <td>MessageCatalog</td> <td>Copy, Create, Enable</td> </tr> <tr> <td>ResourceLock</td> <td>Copy, Create, Update, Enable</td> </tr> <tr> <td>Service</td> <td>Enable</td> </tr> </table>	API Object	Removed	EventActionRun	Copy, Create, Update, Enable	FMLog	Copy, Create, Update, Delete	InterMasterVariable	Enable	JobReport	Enable	MessageCatalog	Copy, Create, Enable	ResourceLock	Copy, Create, Update, Enable	Service	Enable
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Feature	Description
	<p>We added the list that contains the security category required to make CRUD operations for the object. For more information, see Tidal Automation REST API Reference Guide – Using the TA REST API Chapter.</p>
<p><b>Tidal Automation Adapters</b></p>	<p>We released the Google Cloud Compute Engine Adapter that integrates Tidal Automation with Google Cloud Compute Engine and allows you to create, schedule, and run Google Cloud Compute Engine jobs through TA.</p>
	<p>***** End Of Document*****</p>