Oracle® Application Testing Suite

Release Notes

Release 13.1.0.1

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June 2017

This document includes updated information for Oracle Application Testing Suite version 13.1.0.1. The information in this document is more up-to-date than that in the manuals. Many of the issues outlined in this document will be corrected in upcoming releases. If you have any questions or problems, please contact our support group at http://www.oracle.com/support/index.html.

Contents

This document has the following sections:

New Features and Updates in this Release

This version includes maintenance improvements to the existing features as well as new features outlined below.

Oracle Application Testing Suite 13.1.0.1 - New Features and Updates

- **Oracle OpenScript Image Based Recording and Playback** - Oracle OpenScript supports recording image based functional test scripts. Image based recording supports capturing areas of the screen which are saved to files. Playback compares the current screen to the saved files to determine if they match.
- **Oracle OpenScript JET Module** - Oracle OpenScript includes a new Functional Test Module to support record and playback of Oracle JET (Oracle JavaScript Extension Toolkit) based applications.
- **Oracle OpenScript Siebel OpenUI Module** - Oracle OpenScript includes a new Functional Test Module to support record and playback of Siebel OpenUI based applications.

- **Oracle OpenScript Supports Chrome 64-bit** - Oracle OpenScript browser suppport now includes Chrome 64-bit browsers.
- **Oracle OpenScript Supports Using the Chrome Mobile Emulator** - Oracle OpenScript supports using the Chrome browser Device Mode to simulate recording of a mobile device for functional testing.
- **Oracle OpenScript RESTful Web Services Manager** - Oracle OpenScript Web Services Module includes a new RESTful Web Services Manager to support creating Web Services scripts based upon RESTful requests.
- **Oracle Load Testing User Interface** - Oracle Load Testing now includes a new user interface with streamlined features and options.
- **Oracle Load Testing Raw Data** - Oracle Load Testing now includes raw data in reports without the need to import CSV files from the agent machines.
- **Oracle Load Testing Test Goals** - Oracle Load Testing now includes Test Goals settings in the Autopilot for specifying which test conditions must be met to achieve the test goal.
- **Oracle Test Manager Copy/Paste** - Oracle Test Manager now includes the ability to copy and paste tree nodes between projects for Test Plans, Requirements, Tests, Test Execution, and Issues.

Announcements

1. End of Support for Internet Explorer 10.x is Being Planned for Future Releases of Oracle Application Testing Suite.

End of Support for Internet Explorer 10.x

Upcoming end of support in Oracle Application Testing Suite - Internet Explorer version 10.x.

What is being announced?

Oracle Application Testing Suite version 12.5.0.3 is planned to be the last version to support Internet Explorer 10.x. IE 9.x will only be supported on Win2008 SP2.

Why is this being announced?

Microsoft has announced an updated support policy for Internet Explorer browsers.

What is the impact of end of support?

The end of support will mean customers will have to move their test platform to a supported browser.

What do you need to do?

What will you do as Internet Explorer 10.x support is removed in a future release?

If Internet Explorer 10.x browser is being used in your environment, you should begin planning for the end of support for Internet Explorer 10.x and system upgrades to make sure the continuity of your test process management, while Internet Explorer 10.x support is phased out in a future release.

Who to contact for more information?

If you have any questions or concerns regarding this upcoming change, please update the My Oracle Support Communities thread to get resolutions, information or access to the Oracle Application Testing Suite Product Management.

The related My Oracle Support Communities thread can be accessed here: https://communities.oracle.com/portal/server.pt/community/view_discussion_topic/216?threadid=280470&doPagination=false&Portlet=View%20Discussion&PrevPage=Communities-EditDiscussion.

The related Microsoft lifecycle factsheet can be accessed here: https://support.microsoft.com/en-us/lifecycle#gp/Microsoft-Internet-Explorer.

System Requirements

Oracle Application Testing Suite has the following system requirements:

Oracle Functional Testing/OpenScript

Oracle Functional Testing's OpenScript scripting platform has the following system requirements:

- Operating System (32-bit and 64-bit versions): Windows 10, Windows 8.1, Windows 7, Windows 2008, Windows 2008 R2, Windows 2012 Server.

  Note: Functional Test scripts can be played back on Linux. GUI accessibility and installing certified version of Firefox (32-bit) are required

- Memory: Minimum 1 GB
- System: x86, 32-bit or 64-bit processor, 2.6 GHz or faster
- Disk Space: 4 GB minimum
- Browser (32-bit): Internet Explorer 11.x; Firefox (ESR) 31.x, 38.x, 45.x; Chrome 33 or higher (32-bit and 64-bit).
- Oracle Forms: Oracle E-Business Suite Release 12 (Forms 10g) running on Sun JRE and E-Business Suite Release 11i (Forms 6i). Note that E-Business Suite versions running on Jinitiator are not supported with the Oracle EBS/Forms Functional Test module. If your E-Business Suite version runs using Jinitiator, you should use Oracle Application Testing Suite version 12.3.0.x (or previous versions).
- Java Runtime Environment: JRE 1.6 minimum, JRE 1.7, JRE 1.8.

Oracle Load Testing

Oracle Load Testing has the following system requirements:

- Operating System (32-bit and 64-bit versions): Windows 7, Windows 8.1, Windows 2008, Windows 2008 R2, Windows 2012 Server. Oracle Enterprise Linux 5.x, 6.x (64-bit versions only). Windows 2008 R2 and Windows 2012 Server are supported systems for functional test-type scripts during load tests.
- Memory: Minimum 2 GB.

- System: x86, 32-bit or 64-bit processor, 2.6 GHz or faster
- Disk Space: 10 GB minimum free (at least 3 GB free on the system drive)
- Browser (32-bit): Internet Explorer 11.x; Firefox (ESR) 31.x; 38.x, 45.x.
- Database: Oracle EE 11*g* EE 12*c*, XE 11*g*.
- Application Server: Oracle Fusion Middleware 12.1.3.0.0.
- Oracle Load Testing Agent also supported on Linux 64-bit, in addition to Windows 32-bit and 64-bit operating systems listed above.

Note: These are minimum requirements only and actual requirements for the Oracle Load Testing Server will vary depending on the size and configuration of your load test. If you are running larger load tests, of greater than 1000 Virtual Users, you should consider deploying Oracle Load Testing on a faster server class machine with additional RAM recommended.

Note: Oracle recommends running the Oracle Load Testing Server and Agents on separate systems for production load testing. The amount of memory required on the Oracle Load Testing Agent systems may increase based on the number of Virtual Users that will be assigned to run on each Agent. For more information, visit the QA/Testing Technology Center on Oracle Technology Network or contact your Oracle representative.

Oracle Test Manager

Oracle Test Manager has the following system requirements:

- Operating System (32-bit and 64-bit versions): Windows 7, Windows 8.1, Windows 2008, Windows 2008 R2, Windows 2012 Server. Oracle Enterprise Linux 5.x, 6.x (64-bit versions only).
- Memory: Minimum 2 GB.
- System: x86, 32-bit or 64-bit processor, 2.6 GHz or faster
- Disk Space: 10 GB minimum free (at least 3 GB free on the system drive)
- Browser (32-bit): Internet Explorer 11.x; Firefox 31.x; 38.x, 45.x;.
- Database: Oracle EE 11*g* EE 12*c*, XE 11*g*.
- Application Server: Oracle Fusion Middleware 12.1.3.0.0.

Note: These are minimum requirements only and actual requirements for Oracle Test Manager will vary depending on the quantity of test assets stored and number of concurrent users accessing the application. If you have a large quantity of test cases, requirements or issues stored and/or are deploying Oracle Test Manager for a team greater than 10 users, you should consider deploying Oracle Test Manager on a faster server class machine with additional RAM recommended.

Additional Notes

The following are additional notes about system requirements:

- The Oracle Application Testing Suite/OpenScript PeopleSoft Load Testing Accelerator does not support the Websockets/Push Notification Framework features provided in Oracle's PeopleSoft PeopleTools 8.54+.
- The Oracle Application Testing Suite is compatible with an Oracle 11*g* Express Edition (XE) database for use with Oracle Load Testing and Oracle Test Manager. Although this is useful for demos, for production usage switching to Oracle's 11*g* Enterprise Edition or Oracle's 12*c* Enterprise Edition database is highly recommended. Oracle 11*g* Standard Edition and Oracle 11*g* EE or SE are also supported.
- The Oracle Express Edition (XE) database or Oracle Enterprise Edition database must be downloaded and installed separately before the ATS download and install.
- System memory requirements do not take into account other processes that may be running and using memory on your system, reducing free uncommitted memory available.
- When installed on the same machine, Oracle Load Testing and Oracle Test Manager will run on the same server and use shared system resources. Oracle Functional Test/OpenScript is a separate application that has its own memory and CPU requirements.
- Oracle Load Testing allows you to distribute your Virtual Users to run from remote Agent machines. Users must install the Agent-Only Remote Agent install component on their Agent machines to enable this functionality.
- When recording and playing back EBS/Forms functional test scripts, all JRE Plug-in security dialogs are automatically suppressed. Unsigned, self-signed and other security vulnerable applications can be automatically allowed to run.
- Oracle Application Testing Suite cannot be installed on a 64-bit WebLogic on MS Windows. The Oracle Application Testing Suite products will run in 32-bit compatibility mode when installed on 64-bit MS Windows operating systems. It is possible for Oracle Application Testing Suite to be installed on an existing WebLogic server. However, if the pre-installed WebLogic server is JRockit plus WebLogic (64-bit) environment, some functions in Oracle Application Testing Suite will not work properly.
- The legacy Oracle Functional Testing, VB-based scripting platform and associated components (such as Job Scheduler) are no longer included with the ATS installer starting with version 9.2. Customers that still require this product should use ATS 9.1 or older versions supported under Oracle’s Lifetime Support Policy.

Installing the Oracle Application Testing Suite

See the *Oracle Application Testing Suite Installation Guide*.

Tutorial and Documentation for the Oracle Application Testing Suite

The Oracle Application Testing Suite includes product documentation in Adobe Acrobat .PDF format and online help for each application and utility. The

documentation includes electronic versions of the Getting Started Guide, OpenScript User's Guide, Oracle Load Testing User's Guide, Oracle Test Manager User's Guide and Release Notes. The PDF files are installed to the <*installDir*>/docs directory.

You need the Adobe® Acrobat® Reader v4 (or newer) to open and view the documents. You can download the reader from the Adobe web site at `http://get.adobe.com/reader/`.

All of the components of the Oracle Application Testing Suite include comprehensive online Help. You can access the online help using the Help menu options inside of each product.

Known Problems, Limitations and Workarounds

This section lists known issues and workaround solutions for the components in the Oracle Application Testing Suite.

Note: On Windows 7 (UAC systems), it is necessary to run commands from an elevated command line in order to restart services. If you try to run it from the **Start** menu, you will see the following errors in the cmd window:

```
System error 5 has occurred.
Access is denied.
```

Run `services.msc` from the command line and restart the services from there. Windows 7 (UAC systems) require administrator privileges to run commands from an elevated command line in order to stop and restart services.

Oracle Application Testing Suite

The following are known issues and workaround solutions for Oracle Application Testing Suite.

- When upgrading Oracle Application Testing Suite from a previous version, the installation process may display a Confirm message indicating the Oracle Test Manager schema is an older version and must be upgraded to the latest version. The message recommends making a backup of the schema and requires you to select the **I have a backup of the schema I am about to upgrade** checkbox before proceeding.

  If you do not have a backup of the schema click **No** to exit the installation and make a backup of the schema before proceeding. See the "Exporting and Importing Databases" section of the Configuring Databases chapter of the *Oracle Test Manager User's Guide* or online help for information about backing up the database.

  If you do have a backup of the schema, select the **I have a backup of the schema I am about to upgrade** checkbox and click **Yes** to proceed with the installation. If the upgrade procedure detects any problems with the database (such as duplicate records or incorrect sequence values) it will automatically correct the problems.

- **Problem**: Oracle Load Testing, Oracle Test Manager, and agent server applications run out of heap even when set to 1GB on Windows 32-bit installations of Oracle Application Testing Suite.

Resolution: Install and use the 64-bit Oracle Appliction Testing Suite server (Oracle Load Testing and Oracle Test Manager) and agent components on Linux to set the max heap size to more than 1GB.

- **Problem**: FileNotFoundException when upgrading Oracle Application Testing Suite from 12.3.0.1 to 12.4.0.1 in linux after running /scratch/.../oats_home/root.sh:

  ```
  java.io.FileNotFoundException:
  /scratch/.../oracleats/config/agent_manager_auth.properties (Permission denied)
  ```

  Resolution: Delete the `agent_manager_auth.properties` file and run `root.sh` again.

- **Problem**: Internet Explorer 8 browser incompatibilities related to Cumulative Security Update for Internet Explorer 974455 (patch version 8.0.7600.16385).

  Resolution: Apply the browser updates specified in the Microsoft support article: http://support.microsoft.com/en-us/kb/976749.

- **Problem**: Non-administrator user experiences problems using Internet Explorer 9 in Oracle Load Testing or Oracle Test Manager.

  Resolution: Non-administrator users should disable protected mode if using Internet Explorer 9.

  1. Close Oracle Application Testing Suite applications.
  2. Select **Internet Options** from the **Tools** menu in IE9.
  3. Select the **Security** tab.
  4. Select **Local Intranet**.
  5. Select the **Enable Protected Mode** checkbox.
  6. Click **OK**.
  7. Restart IE9/Oracle Application Testing Suite applications.

- **Problem**: If the Oracle Application Testing Suite Application Service does not start and the log file <*installdir*>\oats\servers\AdminServer\logs\AdminServer.log contains the following error:

  ```
  weblogic.store.PersistentStoreException: [Store:280073]The file store "WLS_
  DIAGNOSTICS" could not be opened because it contained a file with the invalid
  version 1. A file of version 2 was expected.
  ```

  Resolution: Delete the .DAT file in: <*installdir*>\oats\servers\AdminServer\data\store\diagnostics\ and then restart the server.

  The behavior may occur when starting Oracle Application Testing Suite Application Service and the service stays in starting mode even after the restarting service command window disappears. This condition may happen when the Weblogic (WLS) service is stopped abruptly - either from a machine reboot or the process is stopped for some reason.

- **Problem**: In some cases, the Oracle Universal Installer (OUI) hangs after installing the Oracle Application Testing Suite. If this situation occurs, you can verify the installation by checking the installation log (typically C:\Program Files\Oracle\inventory\logs\installActions-xxxx.log) for a "OATS installed successfully." entry.

Resolution: Use the Windows Task Manager, Processes tab to end all running `cmd.exe` processes and, if necessary, end the OUI application process in Task Manager.

- **Problem**: After you install, you can't login to Oracle Load Testing, Oracle Test Manager, Oracle Administrator, etc.

  Resolution: During install, you will be prompted for a default password to use in the various OATS products where passwords may be required. It's important that you remember or write down this password as it will be needed to login to these applications (username will typically be "default" or "administrator"). If you don't remember the password, you will have to re-run the installer and establish a new default password. The passwords can be changed and new user accounts added through the Administrator after install.

- **Problem**: Installation on Japanese systems with existing Oracle database.

  Resolution: In cases where installing Oracle Application Testing Suite on a Japanese system with the option to use an existing Oracle database, you will need to add a system environment variable `NLS_LANG` with value of `Japanese_Japan.JA16SJIS` and restart the system to apply. If the variable already exists with different value on the system, it's not recommended to install ATS on the system because the change will affect other applications which use Oracle database.

Oracle Load Testing

The following are known issues and workaround solutions for Oracle Load Testing.

- **Problem**: Some Virtual Users continue running after reaching the specified Test Goal in the Autopilot using **After a delay of** setting set to (00:00:00).

  Resolution: Increase the **After a delay of** (hh:mm:ss) setting to greater than zero. For example, 00:00:01.

- **Problem**: Data Transmission Interruption when loading many graphs or when trying to create graphs from very large data sets using Internet Explorer.

  Resolution: Reduce the Data Granularity in the **Advanced** tab of the graph options. Set the **Max. Data Points** to a lower value. For example, from 100 to 50.

- **Problem**: Siebel Functional Test script playback halts on Auto Fix dialog box waiting for user interaction causing script failure.

  Resolution: Verify the correct version of Java is installed. Workaround is to disable the "Auto fix" dialog box from appearing in the Seibel application, as follows:

  1. Log into the Siebel application.
  2. Site Map (globe icon in the upper right corner).
  3. Select **Administration** then **Server Configuration**.
  4. Select **Component Definitions**.
  5. Select **Query** (for the top grid).
  6. Search for `SCCObjMgr*` in the **Alias** field (assuming the Siebel application is CallCenter).
  7. Select **Query** in the bottom grid.
  8. Search for the `EnableClientHealthCheck` parameter.
  9. Set value to FALSE.

10. Restart the Siebel service.

- **Problem**: Database ServerStats not working on non-US systems.

  Resolution: In <installdir>\DataCollector\properties, save a backup of the `jagent_service.properties` file.

  Open the `jagent_service.properties` file and find the line:

  ```
  JHP.commandline = -Xmx1024M -Dsun.java2d.noddraw=true -cp "${JHP.classpath}"
  -Dsun.net.inetaddr.ttl="0" oracle.oats.dc.fw.jhp.JHPmain ${JHP.server} -logsize
  2000000 -logparts 2 "${JHP.installDir}\\DataCollector\\properties
  agents.properties"
  ```

  and change it to:

  ```
  JHP.commandline = -Xmx1024M -Duser.language=en -Duser.country=US
  -Dsun.java2d.noddraw=true -cp "${JHP.classpath}" -Dsun.net.inetaddr.ttl="0"
  oracle.oats.dc.fw.jhp.JHPmain ${JHP.server} -logsize 2000000 -logparts 2
  "${JHP.installDir}\\DataCollector\\properties agents.properties"
  ```

  Save the file and restart the agent starter service.

- **Problem**: Microsoft Excel Graphs may not be generated on Windows 2008 R2 machines. If a user tries to export a graph in Oracle Load Testing to and XLS file, it may not generate if the system is a Windows 2008 R2 machine, even with MS Office 2007 installed. The error in the `wls_oats.log` file is:

  ```
  error:  org.jawin.COMException 800a03ec: null
  ```

  Resolution: Workaround is to create a folder named "Desktop" (without quotes) in the following two locations:

  ```
  C:\Windows\System32\config\systemprofile
  C:\Windows\SysWOW64\config\systemprofile
  ```

- **Problem**: Data Collector being forced to authenticate as Guest, no matter what credentials are used causing the error Logon failure: unknown user name or bad password.

  Resolution: Change the machine's local security policy to "Classic" to be able to discover Perfmon counters using the local account (Administrator). See the following for additional information:

  http://msdn.microsoft.com/en-us/library/ek2256kk.aspx

- **Problem**: If a Data Collector process (olt-dc-java-agent.exe) was running and you restart the Oracle Load Testing server and attempt to do something with ServerStats on the server (start a metric, for instance), it will start a second Data Collector process that will not function properly because of the lock established by the first process.

  Resolution: To address this, end the Data Collector process(es) manually, delete the lock file(s) (*$installDir*`\DataCollector\bin\*.pid`), then repeat the ServerStats task attempted previously.

- **Problem**: If your script fails to playback successfully in Oracle Load Testing due to Windows authentication or other user permissions related issues with your application, this may be due to the login authentication of the Oracle Load Testing Agent Service. The Oracle Load Testing Agent Service which runs all the Virtual Users on a given Agent system will by default be installed to run under the Local

System account. This may cause issues for certain applications if they block access to this account.

Resolution: To address this, open the Oracle Load Testing Agent Service in the Services panel and change the login to run under a specific user with appropriate application permissions.

- When using the SNMP data source, new SNMP MIBs that users specify are uploaded to the Oracle Load Testing Server by default and can be accessed only through the Local Oracle Load Testing Data Collector running on that Server. Remote Oracle Load Testing Data Collectors cannot access these MIBs and users need to copy those over manually.
- **Problem**: To use the JMX Data Source, you may need to manually copy the server-specific class files to the <*installdir*>\DataCollector\classes directory on the Data Collector machine. These class files are required for each J2EE Application supported server. The jar files should be same version as the J2EE Application Server. You should get the class files from your Application Server installation. The list of required jar files is contained in the Oracle Load Testing "agents.properties" file located in <*installdir*>\DataCollector\properties.

  Resolution: To do JMX Discovery on WebLogic 10.3.3, doing the following:

  1. Copy <*installdir*>\lib\wlfullclient.jar to <*installdir*>\DataCollector\classes\weblogic
  2. Log in to Oracle Load Testing.
  3. Select **Metrics** from the **ServerStats** menu then select **New**.
  4. Select the JMX Data Source then click **Discover Counters**.
  5. Select the local system and click **Edit**.
  6. Select Oracle WebLogic 9.1 as the server (port 8088), username `oats` and the password (the password specified when installing the Oracle Application Testing Suite product).
  7. Click **OK**.
  8. Click **OK** and the discovery process begins. After a few moments, you will see a full list of the MBeans on the server.

  The ServerStats JMX discovery caches counter information. The side effect is that it also caches error messages. For example, failure to copy the correct jar files to data collector's classes directory prior to attempting the discovery would result in an error. When the discovery is attempted after copying the jar files, the discovery still may not work because of the cache. The recommended workaround is to re-start the Oracle Load Testing Server and retry the discovery.
- **Problem**: When bringing up Oracle Load Testing (or Oracle Test Manager) you get the following error reported by the browser: "Unable to connect" or "Can't establish a connection to the server at localhost:8088."

  Resolution: This error indicates that the OATS Application Service is not running. Start (or restart) the OATS Application Service on the server machine where you installed OATS server. You will also want to make sure that the Oracle Database services are also running (this would be OracleServiceXE and OracleXETNSListener if you used the Oracle XE database).
- **Problem**: When bringing up OLT (or OTM) you get the following error reported by the browser: "Error 404--Not Found"

Resolution: This error indicates that the OATS Application Service is unable to connect to the Oracle Database. You will also want to make sure that the Oracle Database services are also running and start/restart them if necessary (this would be OracleServiceXE and OracleXETNSListener if you used the Oracle XE database). Then restart the OATS Application Service.

- The remote ServerStats Data Collector requires the Agent-Only installation for the Remote Agent installed on the remote Data Collector machine.

Oracle Test Manager

The following are known issues and workaround solutions for Oracle Test Manager.

- Adding/editing test steps to a test case will not sync the changes with uncompleted Test Set Runs created before upgrading to 12.5.0.1. The Test Set Runs created after upgrading to 12.5.0.1, which are not completed, will reflect new changes made to test steps.
- Remote execution of JUnit tests or execution of JUnit tests is not supported on Linux. Support for this is planned for a future release.
- The icons in the Tree View for Test Plans, Requirements, Tests, and Issues are automatically assigned and cannot currently be configured by the Administrator.
- After configuring a new database in the Oracle Test Manager Database Configuration dialog, users must restart the Oracle Application Testing Suite Application Service in order for that database to appear in the Database dropdown list on the Oracle Test Manager login page.
- **Problem**: A warning message appears indicating there are duplicate custom field names when logging into the Administrator (http://hostname:8088/admin) to upgrade the OTM database.

  Resolution: The field name(s) listed in the warning message must be renamed before the upgrade can be completed. The field name(s) listed in the warning message will be different depending on each user's situation. Perform the following steps to rename the fields listed in the warning message:

  1. Make a note the duplicate field names in the message and click **OK** to dismiss the warning message.
  2. Connect to the OTM schema and execute the following SQL statement to find the `customfieldid`. In the example below, the query looks for the `customfieldid` for 'Cycle'. You will need to replace 'Cycle' with the actual field name that your upgrade is warning about. The query should return multiple results. Note the `customfieldid` for one of the results because it will be used in step 3.

     ```
     SQL> select customfieldid from "Custom_Field" where name = 'Cycle';
     ```

  3. The `update` statement below will change the custom field name for the referenced `customfieldid`.
     - Replace the name with another name that makes sense but is not a duplicate (i.e. 'Cycle1').
     - Replace the `customfieldid` with the value obtained from step 2.

     ```
     SQL> update "Custom_Field" set name='Cycle1' where customfieldid=32;
     1 row updated.
     ```

4. Commit the change to save it.

```
SQL> commit;
Commit complete.
```

5. Go to http://hostname:8088/admin and log into the OTM database again to upgrade it.

- **Problem**: Error in Tests tab after upgrading from 12.2x to 12.3x.

  Resolution: Enable the RunName field in the Administrator, as follows:

  1. Close the Oracle Test Manager application.
  2. Start the Administrator.
  3. Select the **Fields** tab.
  4. Select **Test Runs** in the left pane.
  5. Select the 'RunName' field.
  6. Click **Edit**.
  7. Select **Enabled** and click **OK**.
  8. Close the Administrator and restart Oracle Test Manager.

- **Problem**: Unable to delete Test Results for a Test executed in a Test Set after the Test Set has been deleted from the Test Execution tab (the Test Run appears in the Run History section of the Test on the Tests tab but the Run does not appear in the Delete Results list).

  Resolution: Delete the Test Results from the Run History section of the Test Set on the Test Execution tab before deleting the Test Set. If you delete the Test Set before deleting the Test Results from the Run History section of the Test Execution tab, the Test Results will still appear in the Run History section of the Tests tab. However, the Test Result from the Test Set run cannot be deleted from the Run History on the Tests tab.

- **Problem**: Any chart report with the "Version" field as first field will not show any data in the data-view.

  Resolution: Do not use the "Version" field as first field.

- **Problem**: Unable to move tree nodes up beyond **Previous** indicator or down beyond **Next** indicator in the tree view. Move operation results in a "Move Operation Failed. Please ensure the node selection is valid." warning message.

  Resolution: Increase the number of displayed nodes in the user options. Select **Options** from the **Tools** menu, select **Tree Preferences** and increase the **Maximum Number of Displayed Nodes** value.

- **Problem**: Goto does not work for Tree grouped by "Run By" or "Las Run Status". This issue may occur after upgrade from Oracle Application Testing Suite pre-9.3x.

  Resolution: Perform the following updates against the Oracle Test Manager database:

  1. Stop ATS service.
  2. Open a command prompt.
  3. Type `sqlplus <schemaname>/<password><@service>`.
  4. When connected to the schema, paste following queries:

```
UPDATE "Special_Field" SET SpecialFieldId=23, label = 'Last Run By' WHERE
AttachedToTypes=8 and Name='runbyuser';

UPDATE "Special_Field" SET SpecialFieldId=24 WHERE AttachedToTypes=8 and
Name='duration';

UPDATE "Special_Field" SET SpecialFieldId=25, Type=7 WHERE
AttachedToTypes=8 and Name='rundate';

commit;
```

5. Type `quit` to exit from sqlplus.
6. Type `exit` to close the command window.
7. Start the ATS service.

- **Problem**: When upgrading from version 9.31 to 12.1, certain pre-existing OTM Filters and Groups may no longer work properly. This issue may be associated with filters based on usernames, such as "Created By", "Owner", "Last Modified By", and with filters based on date and version fields, such as "Last Modified Date" field, and "Version" field.

  Resolution: The filters/groups may need to be recreated manually.

- **Problem**: Exceptions occur or application hangs when attempting to export extremely large projects (projects exceeding 11,000 test cases).

  Resolution: For large databases, change Stuck Thread Max Time parameter (default value is 600, i.e. 10 min.) for the server using the following steps:

  1. Close all OATS applications.
  2. Open a browser and go to `http://localhost:8088/console/` (or `http://<server>:8088/console/`).
  3. Log into WebLogic Server (username "oats", password defined during OATS installation).
  4. Expand the **Environment** tree under **Domain Structure** (left pane).
  5. Select **Servers**.
  6. Click the AdminServer(admin) link under Servers (right pane).
  7. Click the **Tuning** tab.
  8. Change the value for parameter "Stuck Thread Max Time" to a larger appropriate value.
  9. Click **Save** then restart the application server.

- **Problem**: Oracle Test Manager fails to playback certain OpenScript scripts completely.

  Resolution: The following additional steps are required in order to run the following types of OpenScript scripts from Oracle Test Manager:

  - Siebel Functional
  - Oracle Forms Functional
  - Web Functional scripts that rely on system input events, such as key press or mouse click
  - Web Functional scripts that display modal dialog windows

It is necessary to run these scripts using an interactive desktop of a named Windows user account that is always logged in. See also "Command-Line Script Execution" for additional information.

1. For Siebel and Oracle Forms, the named user's account must have visited the Siebel or Oracle Forms site at least once to ensure that all necessary ActiveX controls and plug-ins are installed in the named user's browser.
2. On the Oracle Test Manager agent machine that will run the scripts, stop the "Oracle Application Testing Suite Agent Service" and configure it to start manually.
3. On the Oracle Test Manager agent machine, login as the named Windows user account that will run the scripts. From a command prompt, run the following:

   Windows:

   ```
   $installDir\agentmanager\bin\agentmanager.cmd
   ```

   Linux:

   ```
   $installDir\agentmanager\bin\agentmanager.sh
   ```

   This command starts a Java executable running the agentmanager, it will not "run" the service. All output is logged to the agentmanager.log and the logs of individual agents.

   Note: For Windows 7 systems, the command must be run using the elevated command line. From the Start menu, expand the Accessories, right click on the Command Prompt menu option and select **Run as administrator** from the shortcut menu.

   ---

4. The named user account must remain logged into the system at all times that scripts will be run.

- **Problem**: When bringing up Oracle Load Testing (or Oracle Test Manager) you get the following error reported by the browser: "Unable to connect" or "Can't establish a connection to the server at localhost:8088."

  Resolution: This error indicates that the OATS Application Service is not running. Start (or restart) the OATS Application Service on the server machine where you installed OATS server.

  You will also want to make sure that the Oracle Database services are also running (this would be OracleServiceXE and OracleXETNSListener if you used the Oracle XE database).

- **Problem**: When bringing up Oracle Load Testing (or Oracle Test Manager) you get the following error reported by the browser: "Error 404--Not Found"

  Resolution: This error indicates that the OATS Application Service is unable to connect to the Oracle Database. You will also want to make sure that the Oracle Database services are also running and start/restart them if necessary (this would be OracleServiceXE and OracleXETNSListener if you used the Oracle XE database). Then restart the OATS Application Service. See the above note about stopping and restarting services on Windows 7 systems.

Oracle Database 11*g* Express Edition

The following are known issues and workaround solutions for Oracle Database 11*g* Express Edition.

- **Problem**: In some cases, the Oracle Database 11*g* Express Edition service does not start completely.

  Resolution: If you receive a 404 Not Found error when starting Oracle Load Testing or Oracle Test Manager, restart the Oracle database service and the Oracle Application testing service, as follows:

  Note: On Windows 7 (UAC systems), it is necessary to run commands from an elevated command line in order to restart services. If you try to run it from the **Start** menu, you will see the following errors in the cmd window:

  ```
  System error 5 has occurred.
  Access is denied.
  ```

  Run `services.msc` from the command line and restart the services from there. Windows 7 (UAC systems) require administrator privileges to run commands from an elevated command line in order to stop and restart services.

  ---

  1. Open the Control panel and the Administrative Tools.
  2. Open Services.
  3. Select the Oracle Application Testing Suite Application Service and click **Stop the service**.
  4. Select the OracleServiceXE service and click **Restart the service**.
  5. Wait for the OracleServiceXE service Status to indicate "Started".
  6. Select the Oracle Application Testing Suite Application Service and click **Start the service**.
  7. Wait for the Oracle Application Testing Suite Application Service Status to indicate "Started".
  8. Restart Oracle Load Testing or Oracle Test Manager.

Oracle Functional Testing - OpenScript

The following are known issues and workaround solutions for Oracle OpenScript.

- **Problem**: Scripts recorded using IE9 do not playback correctly using IE11.

  Resolution: Certain browser versions may record event triggers differently. For example, scripts recorded with IE9 record WaitForPage, but scripts recorded on IE11 do not record WaitForPage for the same event trigger in some cases. The IE9-recorded scripts may not play back correctly using IE11. In this case, use a delay time to replace the recorded WaitForPage using the following command format:.

  ```
  getSettings().set("web.REPLACE_WAITFORPAGE_WITH_DELAY", "5600");
  ```

  or the following command line argument:

```
-web.REPLACE_WAITFORPAGE_WITH_DELAY 5600
```

to replace all WaitForPage steps with the specified delay in milliseconds.

- **Problem**: iOS Mobile Safari browser crashes when opening/closing a new tab.

  Resolution: Only actions on the currently active window are supported (for example get child DOM, run JavaScript). Actions are not supported in windows that are not the currently active window.

  The following use case is supported:

  - Performing actions in one window (the currently active window). For example, the currently active window is window index 0, click a link in windows index 0, a new window (windows index 1) opens and the currently active window is now window index 1. Actions are supported at this moment on window index 1. After closing window index 1, the active window is window index 0 again. Actions are supported at this moment on window index 0.

  The following use case is not currently supported:

  - Performing actions on a window that is not the currently active window. For example, the currently active window is window index 0, click a link in windows index 0 that opens a new window (window index 1) and window index 1 becomes the currently active window. Performing actions on the original window index 0 at this moment is not supported as window 0 is no longer the active window.

- **Problem**: OpenScript playback error occurs if the script contains UTF-8 characters. The failure may occur as a Replay Action failed and UTF-8 characters are converted to question mark (?) characters.

  Resolution: Set the OpenScript `-Dfile.encoding=UTF8` startup property as follows:

  1. Close OpenScript.
  2. Right-click the OpenScript startup icon/menu option on the **Start** menu (or Desktop icon, if available).
  3. Select **Properties**.
  4. Add the `-Dfile.encoding=UTF8` property setting to the end of the **Target** string on the **Shortcut** tab. The full **Target** string should be as follows:

     ```
     C:\OracleATS\openScript\OpenScript.exe -configuration openscript_
     configuration -vm C:\OracleATS\openScript\jre\bin\javaw.exe -vmargs
     -Xmx512m -XX:MaxPermSize=256m -Dfile.encoding=UTF8
     ```

  5. Click **OK** to close the OpenScript Properties.
  6. Restart OpenScript using the modified OpenScript Start icon/menu option (or Desktop icon) and playback the script.

- **Problem**: OpenScript captures HTTP requests that are for Google use when using Google Chrome to record HTTP module scripts. Some examples are as follows:

  ```
  www.google.com/searchdomaincheck
  ssl.gstatic.com
  safebrowsing-cache.google.com
  safebrowsing.google.com
  productforums.google.com
  ```

```
www.googletagmanager.com
www.youtube.com
fonts.gstatic.com
clients4.google.com
www.youtube-nocookie.com
```

Resolution: Define URL filters for unnecessary URL requests, a follows:

1. Start OpenScript and open an HTTP module script.
2. Select **OpenScript Preferences** from the **View** menu.
3. Expand the OpenScript peferences and select HTTP under the Record preferences.
4. Open the **URL Filters** tab.
5. Click **Add**.
6. Specify a name and URL pattern for each URL you do not want OpenScript to capture. Specify **Match** as **URL** and **Method** as **Wild card**.
7. Click **OK** to save the filter.
8. Repeat Steps 5 through 7 for each URL.
9. Click **OK** to save the preferences.

- **Problem**: OpenScript recording or playback with Chrome browser not working correctly.

  Resolution: Verify you have a supported version of the Chrome browser for recording and playback. The supported version of Chrome browser for recording/playback is version 33 and higher.

- **Problem**: OpenScript cannot record TLS 1.2 enabled site when selecting **Use TLS 1.2** in Internet Explorer.

  Resolution: Enable **Use SSL 3.0** in Internet Explorer's Advanced Options (Security) to perform the recording. This is required even if the site does not accept SSL v3 traffic.

- **Problem**: OpenScript cannot check Float type values retrieved from a database table using == to check whether or not two values are equal.

  Resolution: Use a SQL statement such as "`select to_char(`*`columnname`*`) as `*`columnname`*` from `*`table`*" and check the values in OpenScript as String type.

- **Problem**: Login dialog is not recognized by Chrome (29+) browser during Web Functional test script playback.

  Resolution: Modify the script's navigation code to use the following URL format for the login navigation for Chrome browser playback (this format is supported by all browsers):

  ```
  String URL = "https://Username:password@WebURL";
  ```

  where *webURL* is the original URL needed for the login navigation.

- **Problem**: Forms applet actions are not recorded on Firefox with dynamic enabling of forms automation.

  Resolution: Always use static enabling of forms automation.

- **Problem**: Certain Document Object Model events may not be recorded correctly when recording actions in JD Edwards EnterpriseOne Grid Controls. Be sure to verify the script recording in the following situations:
  - Clicking a text link in a JDE Grid cell.
  - Clicking an image link in a JDE Grid cell.
  - Clicking a checkbox in a JDE Grid cell.
  - Clicking a tree node in a JDE Grid cell to expand/collapse tree in JDE Grid.

  Resolution: In cases where the JDE Grid cell actions are not recorded properly, you can add the actions to the script tree using the **Add...Other** option on the **Script** menu. Expand the EnterpriseOne Actions and EOneGrid nodes, select the appropriate actions and specify the details. Alternatively, you can edit the script Java code in the Code View to add the actions in the appropriate locations using the JD Edwards EnterpriseOne Grid Control API, as follows:

  ```
  eone.grid(String path).clickCellLink(int row, int column)

  eone.grid(String path).clickCellIcon(int row, int column)

  one.grid(String path).setCellCheckBox(int row, int column, boolean checked)

  one.grid(String path).expandTreeNode(int row) or eone.grid(String
  path).collapseTreeNode(int row)
  ```

  The *path* parameter is the path of the JDE Grid control, which can be copied from another recorded statement. The *row* and *column* parameters are both the 0-based row/column indexes in the JDE Grid control.

- **Problem**: Windows 7 does not permit running OpenScript as non-administrator user. Steps are not recorded in the Windows 7 Secure Desktop environment for non-administrator user when navigating between zones with different security settings. A new process for zones with different security level starts in the browser.

  For example, when starting recording, a browser (brower.launch) starts with the about:blank page – Internet Security Zone. If you start recording the application-under-test – Intranet security zone, a new browser process starts. The OpenScript toolbar is not enabled in the new process and steps performed in the application-under-test are not recorded.

  Resolution: The following workarounds can be used:
  - Set security settings for the Intranet zone to the same as the Internet zone.
  - Add `about:blank` to the Local Intranet zone.

  To set security settings for the Intranet zone:

  1. In Internet Explorer, select **Internet Options** from the **Tools** menu.
  2. Select the **Security** tab.
  3. Select **Internet**.
  4. Note the security level settings for the Internet zone.
  5. Select **Local intranet**.
  6. Set the Security level setting to the same setting as the Internet zone.
  7. Click **OK**.

To add `about:blank` to Local Intranet zone:

1. In Internet Explorer, select **Internet Options** from the **Tools** menu.
2. Select the **Security** tab.
3. Select **Local intranet**.
4. Click **Sites**.
5. Click **Advanced**.
6. Type `about:blank` into **Add this website to the zone** field.
7. Click **Add**.
8. Click **Close**.
9. Click **OK**.
10. Click **OK**.
11. Use the Intranet zone when recording or playing back scripts in OpenScript.

- **Problem**: Adobe Flex controls do not record during Adobe Flex functional testing.

  Note: The automation libraries/swc files are required for Flex Functional Testing only. This does not apply for Adobe Flex (AMF) load testing which records at the protocol level.

  Resolution: The Flex application must include the Adobe Flex automation libraries either at compile time or at run time. You need at least `automation.swc` and `automation_agent.swc` from the Adobe <flex builder>\sdks\3.5.0\frameworks\libs folder (3.5.0 is an Adobe sdk version). Also, `automation_dmv.swc` is required for charts, advanceddatagrid and olapdatagrid support. See the Creating Applications for Testing section of the Adobe Flex Data Visualization Developer's Guide for additional information about the tasks required to include the Flex automation libraries.

  Creating Applications for Testing:

  `http://livedocs.adobe.com/flex/3/html/help.html?content=functest_components2_15.html#178953`

  Adobe Flex Data Visualization Developer's Guide:

  `http://livedocs.adobe.com/flex/3/html/help.html?content=functest_components2_15.html#178953`

  The Oracle OpenScript `openscript_agent.swc` file must be included when re-compiling Flex applications. The Flex application must be linked with the OpenScript Flex agent located in <*installdir*>\OpenScript\plugins\oracle.oats.scripting.modules.flexFT_*version*\flexagent\openscript_agent.swc or equivalent.

- **Problem**: Automatic proxy configuration (**Preferences** - **OpenScript** - **Record** - **HTTP Module**) for Firefox may not correctly configure the browser proxy.

  Resolution: To record through Firefox, you should configure the browser proxy settings manually (Default: host=localhost, port=7777).

- **Problem**: Certain systems may have trouble launching the OpenScript Help (**Help** - **Help Contents**).

Resolution: This can be resolved by configuring the help to open in an external browser window:

1. From the Tester Perspective, select **View** - **OpenScript Preferences**.
2. Click the "Clear" icon next to the filter text field in the upper left. Click the Help tree node and check the "Use external browser" box in the Help preferences.
3. Click **OK** and relaunch OpenScript Help.

- **Problem**: When recording a functional testing script you get the following error: “Cannot connect to browser”.

  Resolution: The browser did not come up in the required amount of time when you clicked the Record button. This could be because the machine was busy or the ATS OpenScript browser add-ons for IE or Firefox were not installed properly. You can try increasing the browser “Startup timeout” setting under OpenScript Preferences, General…Browser section. If that does not work, run the OpenScript Diagnosis Tool under OpenScript Help. The Diagnosis Tool will attempt to correct any browser add-on installation problems, and report any failures it encounters.

- **Problem**: When recording a functional testing script, you do not see any actions added to the script after recording.

  Resolution: The browser add-on is not capturing events and sending them to OpenScript during recording. Run the OpenScript Diagnosis Tool under OpenScript Help. The Diagnosis Tool will attempt to correct any browser add-on installation problems, and report any failures it encounters. You can also try switching from IE to Firefox to see if that works better.

- **Problem**: When you record a Web load test script, you do not see any navigations added to the script after recording.

  Resolution: OpenScript uses an HTTP proxy server between OpenScript and the target application when you record Web load test scripts. If your browser is accessing the Web via a proxy, you may need to chain that proxy through OpenScript’s HTTP recording preferences. OpenScript will attempt to chain the proxy automatically for you using the browser’s proxy settings. If you do still have problems recording HTTP navigations, check the “HTTP” Record preferences for network interface and proxy settings.

  Also, if you are recording a load test script against a local Web application running on the same machine as OpenScript (like Weblogic Medical Records), you cannot use "localhost" as the server name in the http request. So in the browser, specify your starting URL as: http://systemname:7011/medrec/index.action instead of http://localhost:7011/medrec/index.action. This has to do with the fact that IE bypasses the proxy for localhost addresses and is not an issue for recording in Firefox.

- **Problem**: When recording an Oracle EBS/Forms functional testing or load testing script, the browser appears to hang when loading the Oracle Forms applications and you are not able to continue.

  Resolution: The browser you are using to record your script may not have the proper JVM version downloaded/installed that is required to run the Oracle Forms applications. Before you start recording Oracle EBS/Forms functional testing or load testing scripts, step through the EBS/Forms transaction once in the browser stand-alone (i.e. while not recording) to make sure you have the proper

JVM downloaded/installed and confirm that the Forms applications run properly – then try to re-record your script.

- **Problem**: When recording a Siebel functional testing or load testing script, the browser appears to hang when loading the Siebel High Interactivity applications and you are not able to continue.

  Resolution: The browser you are using to record your script may not have the Siebel High Interactivity Framework Active-X components installed that are required to run the Siebel HI applications. Before you start recording Siebel functional testing or load testing scripts, step through the Siebel transaction once in the browser stand-alone (i.e. while not recording) to make sure you have the proper components downloaded/installed and confirm that the Siebel HI applications run properly – then try to re-record your script.

- **Problem**: When recording a Siebel functional testing script, you do not see any Siebel High Interactivity component actions recorded in your script.

  Resolution: In order to record Siebel functional testing scripts in OpenScript, the Siebel Test Automation Component Automation Services (CAS) must be enabled on Siebel Server before recording. Please review the documentation for information on how to enable Siebel Test Automation for Siebel 7.7, 7.8 and 8.x versions. This is not required for Siebel load testing scripts.

- **Problem**: A database error occurs when trying to generate graphs in Oracle Load Testing.

  Resolution: This may occur if the Oracle XE database was installed separately and not part of the Oracle Application Testing Suite installation. The default setting for allowed connections for the XE process is low and needs to be increased. From a command prompt, run the following command, then restart Oracle XE:

  ```
  alter system set processes=200 scope=spfile;
  ```

Web Functional Test Recording with Firefox Troubleshooting

The following section describes Web Functional Test Recording with Firefox Troubleshooting techniques.

- When using the Firefox browser, you should disable or not install any add-ons into the OpenScript-created Firefox profiles.

Command-Line Script Execution

The following are tips, known issues, and workaround solutions for running OpenScript scripts from the Command-Line Interface (CLI).

- **Problem**: Playback does not recognize objects outside of the visible window area. (Note: this is also applicable to playback of scripts from the OpenScript UI.)

  Resolution: When playing back scripts, make sure the browser window is the same size as when the script was recorded. One way to ensure that the browser is the same size is to record the script with the browser window maximized, then add a `web.window("path").maximize()` method to the script code before playing back the script. Also, make sure the machine used to play back the script is set to the same screen resolution as the machine used to record the script.

- **Problem**: Playback does not recognize recorded keyboard actions.

  Resolution: When recording scripts for command-line execution, use mouse clicks instead of keyboard actions to interact with the application-under-test. For

example, when filling in forms, click the mouse on the form fields before entering text rather than using the Tab key. Also, click the Submit button with the mouse rather than pressing the Enter key.

- **Problem**: Playback does not work with Remote Desktop minimized.

  Resolution: Make sure the Remote Desktop is visible/maximized before playback. Alternatively, you can add the `RemoteDesktop_SuppressWhenMinimized` value to the Registry of the system from which you are running the command-line interface, as follows:

  Caution: The following procedures modify your system Registry. Modifying the system Registry carries risk of causing serious problems that may affect the operation of your operating system software. Use the information provided at your own risk.

  ---

  1. Close any currently open Remote Desktop connections.
  2. Select **Run** from the **Start** menu.
  3. Type `regedit` and click **OK**.
  4. Expand one of the following Registry keys depending upon the system and which user account you want to use for the command-line execution:
     - for 32-bit current user account:

       ```
       HKEY_CURRENT_USER\Software\Microsoft\Terminal Server Client
       ```

     - for 32-bit all user accounts:

       ```
       HKEY_LOCAL_MACHINE\Software\Microsoft\Terminal Server Client
       ```

     - for 64-bit current user account:

       ```
       HKEY_CURRENT_USER\Software\Wow6432Node\Microsoft\Terminal Server Client
       ```

     - for 64-bit all user accounts:

       ```
       HKEY_LOCAL_MACHINE\Software\Wow6432Node\Microsoft\Terminal Server
       Client
       ```

  5. Select **New** from the **Edit** menu, then select **DWORD (32-Bit) Value**.
  6. Enter `RemoteDesktop_SuppressWhenMinimized` as the name and press Enter.
  7. Double-click the `RemoteDesktop_SuppressWhenMinimized` registry entry to open the edit dialog box.
  8. Specify `2` in the **Value Data** field and click **OK**.
  9. Close the Registry Editor.

- **Problem**: Need to automatically initiate a Remote Desktop connection after a reboot.

  Resolution: You can initiate a Remote Desktop connection after rebooting the test machine using a saved Remote Desktop Protocol (.rdp) file for a Remote Desktop connection.

  To specify and save a Remote Desktop Protocol file:

1. Select **Accessories** from the **Start** menu, then select **Remote Desktop Connection**.
2. Click the **Options** button.
3. Specify the Logon settings in the **General** tab.
4. If you wish to be able to start the Remote Desktop Connection without being prompted for credentials (user and password), select **Allow me to save credentials**.
5. If you wish to automatically start a program on the Remote Desktop connection, click the **Programs** tab and specify the program to start.
6. Click the **Connect** button.
7. Enter the username and password and click **OK**.
8. Close the Remote Desktop connection.
9. Select **Accessories** from the **Start** menu, then select **Remote Desktop Connection**.
10. Click the **Options** button.
11. Select the **General** tab, if necessary, and click **Save As**.
12. Specify the directory and file name for the .rdp file and click **Save**.
13. If you wish to automatically scale the Remote Desktop when connecting, edit the saved .rdp file in a text editor and add the following setting to the end of the settings:

    ```
    smart sizing:i:1
    ```

14. Schedule the .rdp file to launch automatically after a reboot/restart using Task Scheduler or create a batch file on the test machine using a text editor with the following command:

    ```
    mstsc c:/myRdpFile.rdp
    ```

    where *myRdpFile* is the name you used to save the Remote Desktop connection file.
15. If you use a batch file, schedule the batch file to run using a tool that is capable of launching the batch file automatically after a reboot/restart.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

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