

In this training module you will learn how to troubleshoot the Tivoli<sup>®</sup> Service Automation Manager self-service web 2.0 user interface. The training module also demonstrates how to run debug tools on both server-side code and browser code.

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Objectives	
When you have completed this training module, you can accomplish these tasks:	
	•
<ul> <li>Describe the system components connected to the Tivoli Service Automation Manager V7.2 self-service user interface</li> </ul>	2
<ul> <li>Determine whether a specific type and revision of internet browser is recommended for usage with Tivoli Service Automation Manager V7.2</li> </ul>	
Check Tivoli Service Automation Manager V7.2 self-service user interface browser settings	
<ul> <li>Check workstation screen resolution settings</li> </ul>	
<ul> <li>Use the TPAE WebSphere<sup>®</sup> Application Server diagnostic trace feature to capture log messages relevant to TSAM V7.2 self-service user interface operation</li> </ul>	
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When you have completed this training module, you can accomplish these tasks:

- Describe components connected to the self-service user interface
- Determine whether the internet browser is recommended
- Check browser settings
- Check for acceptable screen resolution settings

- Use the WebSphere Application Server diagnostic trace and check for relevant log messages



The self-service web 2.0 user interface is a Tivoli Process Automation Engine RESTbased application interface. This interface is part of Tivoli Service Automation Manager deployments. Not all data goes through a Tivoli Service Automation Manager element. Some data is retrieved directly from other IBM Tivoli products such as Tivoli Service Request Manager<sup>®</sup> or Tivoli Provisioning Manager. All of these IBM Tivoli products are based on data models that can be accessed through the interface. For security reasons Maximo<sup>®</sup> Business Object database tables are not directly accessible. Using the RESTbased interface exposes only the data that a user is authorized to access.

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Supported browsers	
<ul> <li>IBM Tivoli Service Automation Manager V7.2 self-service user interface supports the browsers <ul> <li>Internet Explorer 8</li> <li>Requires Silverlight</li> <li>Requires Ajax</li> </ul> </li> <li>Mozilla firefox <ul> <li>3.5</li> <li>3.6</li> </ul> </li> </ul>	lese
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Firefox 3.5, 3.6, and Internet Explorer 8 are the supported browsers. Internet Explorer 7 is no longer officially supported. Internet Explorer browsers require Silverlight and Ajax enablement.

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Recommended browser settings	
These browser settings are recommended:	
<ul> <li>Minimum resolution: 1024x768</li> </ul>	
<ul> <li>JavaScript: enabled</li> </ul>	
<ul> <li>CSS: enabled</li> </ul>	
<ul> <li>SSL: enabled</li> </ul>	
<ul> <li>Cookies: enabled</li> </ul>	
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When self-service user interface problems occur the first thing to check are the internet browser settings. The minimum resolution setting is 1024x768. JavaScript, CSS, SSL, and cookies should be enabled.

		IBM
Check	ing workstation screen resolution (example)	
Checking	the workstation screen resolution in a Windows OS environment:	
<ul> <li>Self-se</li> </ul>	rvice user interface minimum recommended setting is 1024x768	
■ Go to <b>(</b> – Vie – Adj	Control Panel and click Adjust Screen Resolution w the existing screen resolution setting ust if needed	
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Remember that the screen resolution should be set at or higher than the recommended minimum setting of 1024x768.

Check firefox javascript enabled Check firefox JavaScript enabled Check firefox JavaScript enabled           Image: Content Applications Privacy Security Advanced           Image: Content Applications Privacy Security Advanced	IBM
Check firefox JavaScript enabled	neck firefox javascript enabled
Check firefox JavaScript enabled	
Options     23       General     Tabs       General     Tabs       Other     Applications       Privacy     Security       Advanced       Block pop-up windows	eck firefox JavaScript enabled
Load įmages automatically Exceptions Enable JavaScript Advanced Advanced JavaScript Settings Load Interpretation of the set	Options       33         General       Tabs       Content       Applications       Privacy       Security       Advanced         Block pop-up windows       Exceptions       Exceptions       Exceptions       Exceptions         Cload images automatically       Exceptions       Advanced.       Exceptions       Exceptions         Privacy       Enable JavaScript       Advanced.       Exceptions       Exceptions         Advanced JavaScript Settings       If       Advanced         Peria       Allow scripts to:       Colors       Colors         Baise or lower windows       Colors       Chgose       Chgose         Hide the status bar       Chgose       Chgose       Chgose         OK       Cancel       Help       Help
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Check that JavaScript is enabled for Firefox browsers by going to **Tools** > **Options** > **Content**. The **Enable JavaScript** check box should be checked. **Advanced JavaScript Settings** should allow scripts to **Move or resize existing windows** and **Disable or replace context menus**.

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Check internet explorer eight javascript enabled	
Check internet explorer eight JavaScript enabled	
Internet Options	
Joeneral       Security Settings - Internet Zone         Select a zone to view or change security settings.         Internet       Internet         Internet       Settings         Internet       Deable         Internet       Settings         Internet       Setting	
Security level for this zone Custom Custom strops. - To drange the settings, dck Custom level. - To use the recommended settings, dck Default level. Enable Protected Mode (requires restarting Internet Explorer) Custom level Default level Reset custom settings Reset custom settings Reset custom settings	
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Check that JavaScript is enabled for Internet Explorer eight browsers by going to **Tools** > **Internet Options** > **Security** and click **Custom level**. On the popup window scroll to **Scripting**. **Active scripting** should be set to **Enable**.

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beck firefox CSS enabled			
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BM Workp	ace - Home - Mozilla Firefox: It	M Edition	
	M History Bookmarks 100		
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A Most V	Status <u>B</u> ar		
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IDIM V	<u>S</u> top Esc		
wS	Reload Ctrl+R	Sign out - Edit Profile	
	Zoom +		
Keith	Page Style	No Style	
	Character Encoding	<u>Basic Page Style</u>	
Home	Page Source Ctrl+U	Career and life Ma	
	<u>Full Screen</u> F11		

From the Firefox toolbar click **View** > **Page Style**. CSS is enabled when **Basic Page Style** is checked.

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Check internet explore	er css enabled	
Check internet explorer eight	SS enabled	
Looonaa mina		
File Find Disable View Images Cache	Tools Validate Browser Mode: IE9 Compat	View Document Mode: IE8 standards
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- V #bro - V #bro - VP - VP - VP - VI - VLI		
☐ ♥font-size: 1em; ☐ ♥DD		
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For Internet Explorer 8 the CSS functionality is enabled when **CSS** is not checked in the **Disable** menu.

	IBM
Check firefox secure socket layer enabled	
Check firefox SSL enabled	
Options 🗾	
General Tabr. Content Ambintions Prince Security Advanced	
General Network Update Encryption	
Protocols V Use SSL 2.0 V Use TLS 1.0	
Certificates When a server requests my nersonal certificates	
<ul> <li>Seject one automatically          <ul> <li>Ask me every time</li> </ul> </li> </ul>	
View Certificates         Revocation Lists         Validation         Security Devices	
OK Cancel Help	
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Firefox SSL is enabled by going to **Options** > **Advanced** > **Encryption** > **Protocols** and checking the **Use SSL 3.0** check box.



For Internet Explorer 8 check that SSL is enabled by going to **Tools** > **Internet Options** > **Advanced** > **Settings** and checking the **Use SSL 3.0** check box.

Check firefox cookies enab	led
	Options
Under meior Coories settings	General Tabs Content Applications Privacy Security Advanced History Firefox will: Use custom settings for history • Automatically start Firefox in a private browsing session @ Remember gownload history @ Remember gownload history @ Remember gownload history @ Remember search and form history @ Remember search and form history @ Accept cookies from sites @ Accept cookies from sites @ Accept torkind-party cookies & Keep until: they expire • Clear history when Firefox closes Location Bar When using the location bar, suggest: History and Bookmarks •

Check the cookie settings for the Mozilla Firefox web browsers by going to **Tools** > **Options** > **Privacy**. The check boxes for **Accept cookies from sites** and **Accept vendor cookies** should be checked.

Check internet explorer eight co	ookies settings (1 of 2)
nternet options	<ul> <li>↓ ↓ X Ar Live Search</li> </ul>
	<ul> <li>Page × Safety Tools *</li> <li>Piagnose Connection Problems</li> <li>Reopen Last Browsing Session</li> <li>Pop-up Blocker</li> <li>Manage Add-ons</li> <li>Work Offline</li> <li>Compatibility View</li> <li>Compatibility View Settings</li> <li>Full Screen</li> <li>Full Screen</li> <li>Full Screen</li> <li>Full Screen</li> <li>Suggested Sites</li> <li>Blog This in Windows Live Writer</li> </ul>

To check Internet Explorer 8 web browser cookie settings start out by going to **Internet Options**.

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Check internet explorer eight co	ookies settings (2 of 2)
	Internet Options
Privacy tab	General Security Privacy Content Connections Programs Advanced
	Setting Select a setting for the Internet zone.
	Medium
	Blocks third-party cookies that do not have a compact privacy policy Blocks third-party cookies that save information that can be used to contact you without your explicit consent Restricts first-party cookies that save information that can be used to contact you without your implicit consent
	Sites Import Advanced Default
	Pop-up Blocker Prevent most pop-up windows from Settings
	appearing.
	InPrivate
	☐ Do not collect data for use by InPrivate Filtering Disable toolbars and extensions when InPrivate Browsing starts
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Once at **Internet Options** go to the **Privacy Tab.** Change the **Settings** to an Internet zone that allows enablement of the required cookies.



The standard WebSphere log is used for debugging server-side code. Activate the log for the package com.ibm.tivoli.simplesrm and set the log level to FINEST. To accomplish this go to the WebSphere Application Server administrative console. From the **Logging and Tracing** menu follow the path through **MXServer** to **Diagnostic Trace**. Finally, go to **Change Log Level Details**. The server-side log includes the logs from the SimpleSRM servlets (offering icons, some of the authentication, help redirection...). User interface exceptions are typically sent to the server log.



The biggest part of debugging happens on the browser code. Firebug is used for viewing the Mozilla Firefox browser logs. The Developer tools window is used for viewing Internet Explorer 8 browser logs.

				IBM
Internet explore	er eight develop	per tools		
Internet explorer eigh	t developer tools			
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<ul> <li>JavaScript</li> </ul>				
- JavaScript     - CSS     Tivoli Self Service Statio     File Find Disable View Outling	<b>n - Developer Tools</b> e Images Cache Tools Valid	te Browser Mode: IE8	Document Mode: IE7 Standards	_
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Internet Explorer 8 comes with an integrated debugging tool. This tool can be initiated by pressing the F12 key. It comes with many JavaScript debugging tools and tools for debugging HTML and CSS coding.



Firebug is the reference tool for debugging Mozilla Firefox. Activate Firebug only when needed because it consumes a lot of memory and processor capacity. The console Net tabs should be activated. The console log shows the "standard output" for JavaScript, and the Net tab shows the requests (GET, PUT, POST). When the Net tab is activated, requests also show up in the Console tab.

To facilitate JavaScript debugging, include the debug parameter in theURL:http://hostname:9080/SimpleSRM/index.jsp?debug=2.

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Summary
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