

Sun ONE Application Framework 2.0 Release Notes

These release notes contain important information available at the time of the version 2.0 release of the Sun ONE Application Framework software. Features, known problems, and other late-breaking issues are addressed here. Read this document before you begin using the Sun ONE Application Framework.

An electronic version of these release notes can be found at the Sun Microsystems, Inc. documentation web site:

<http://www.sun.com/docs/>

Check the web site prior to installing and setting up your software and then periodically thereafter to view the most up-to-date release notes and manuals.

These release notes contain the following sections:

- Features of the Sun ONE Application Framework Version 2.0
- Documentation
- Software and Hardware Requirements
- Known Problems and Limitations
- How to Report Problems

Features of the Sun ONE Application Framework Version 2.0

- State-of-the-Art J2EE Design Patterns for Building Enterprise Web Applications
- Design-Pattern-Based Skeleton

State-of-the-Art J2EE Design Patterns for Building Enterprise Web Applications

Uses familiar concepts such as display fields, application events, component hierarchies, and a page-centric development approach, with a state-of-the-art design based on the Model-View Controller and Service-to-Workers patterns to build applications.

Design-Pattern-Based Skeleton

- Provides a design-pattern-based skeleton on which enterprise architects can hang other portions of their architectures.
- Provides an easy development approach with a clearly delineated design that integrates in a well-defined way with other enterprise tiers and components.
- Unites familiar concepts such as display fields, application events, component hierarchies, and a page-centric development approach, with a state-of-the-art design based on the Model-View-Controller and Service-to-Workers patterns.
- Helps developers build reusable components by providing both low- and high-level infrastructure and design patterns. Developer-defined components are first-class objects that interact with the Sun ONE Application Framework as if they were native components. Components can be arbitrarily combined and reused throughout an application, across applications, and across projects and companies.
- Helps introduce new J2EE developers to Web application development, and empowers advanced J2EE developers by providing them a powerful toolkit with which to develop advanced features not possible with other frameworks.

The Sun ONE Application Framework provides unprecedented extensibility for developers that other frameworks simply cannot match!

Documentation

All Sun Microsystems product documentation can be found at the following site:

<http://www.sun.com/docs/>

This section contains the following information:

- Sun ONE Application Framework Documentation

- Referenced Documentation

Sun ONE Application Framework Documentation

In addition to these release notes, the Sun ONE Application Framework product includes other documentation. This section contains a brief synopsis of each document included in the document collection for this release.

These documents can be found at:

<http://www.sun.com/docs/db/prod/>

- **Sun ONE Application Framework Overview**—(PN 817-0447-10) Describes the Sun ONE Application Framework, who should be interested in it, what it does, how it works, and how it differs from other Web application frameworks. Includes design and architecture FAQ.
- **Sun ONE Application Framework Getting Started**—(PN 817-0446-10) Addresses the developer who is at least somewhat familiar with building Web applications using existing J2EE Web Technologies (servlets and JSPs), but new to building Web applications with the Application Framework.
- **Sun ONE Application Framework Installation Guide**—(PN 817-0445-10) Describes the environment required and the steps you need to follow to install the Sun ONE Application Framework within the Sun™ ONE Studio.

The following documentation is accessed from within the Sun ONE Application Framework product:

Sun ONE Application Framework Online Help—Provides content-specific online help for the Sun ONE Application Framework software that integrates with the Sun ONE Studio and the Sun ONE Application Server.

Referenced Documentation

Elements necessary to run the Sun ONE Application Framework product include the Sun ONE Studio 4, Enterprise Edition (formerly known as Forte for Java), and the Sun ONE Application Server, Standard Edition, each of which have their own set of documentation.

- The Sun ONE Studio documentation can be found at the Sun documentation site at:

<http://www.sun.com/docs/prod/devel.prod>

- The Sun ONE Application Server documentation can be found at the Sun documentation site at:

<http://www.sun.com/docs/db/prod/s1appsrv>

Software and Hardware Requirements

This section discusses the requirements for installing the Sun ONE Application Server.

- Solaris
- Windows

Solaris

Your Solaris system must meet the following requirements before you can install Sun ONE Application Framework 2.0:

Operating Systems

Solaris™ 9 and 8 operating environments

System Requirements

- Memory: 512 MB minimum (varies by configuration)
- Disk Space: 50 MB minimum

Windows

Your Windows system must meet the following requirements before you can install Sun ONE Application Framework 2.0:

Operating Systems

The following operating systems will work with the Sun ONE Application Framework 2.0:

- Windows 2000 Server, SP2+
- Windows 2000 Advanced Server, SP2+
- Windows 2000 Professional, Service Pack (SP)2+
- Windows XP Professional, SP2+

System Requirements

- Memory: 256 MB minimum
- Disk Space: 50 MB

Known Problems and Limitations

This section describes known problems and associated workarounds for the Sun ONE Application Framework product. This information is organized into the following sections:

- Browser Issues
- Sun ONE Application Framework Application Issues
- Sun ONE Studio 4 Issues
- Internationalization Issues
- Database Issues

Browser Issues

This section describes known browser issues, and the associated solutions.

ID	Summary
4728704	<p data-bbox="235 260 728 295">Browser time out error message appears.</p> <p data-bbox="235 303 1206 399">When choosing the Execute (force reload) option to execute a ViewBean without closing the Netscape (or IE) browser, and then executing the same or another View Bean, the following error message appears: <i>Application Error. The HTTP session has timed out.</i></p> <p data-bbox="235 407 392 442">Workaround</p> <ol data-bbox="235 451 1163 616" style="list-style-type: none"> 1. Close all browsers in all work spaces for all machines before executing. 2. Start only one browser (best from the same window where the Sun ONE Studio was started). 3. Execute the application. <p data-bbox="235 633 314 668">NOTE</p> <p data-bbox="235 685 1220 755">This occurs because the browser has a cached session cookie and, based on defaults, the J2EE spec requires the container to issue a time out.</p> <p data-bbox="235 763 1220 894">An alternative workaround is to implement the <code>onSessionTimeout()</code> event on the application or module servlet as a no-op. This will ignore the session timeout during development. However, be careful to remember to change this behavior to something appropriate before putting the application into production.</p>

Sun ONE Application Framework Application Issues

This section describes known Sun ONE Application Framework issues, and the associated solutions.

ID	Summary
4726331	<p data-bbox="235 1267 1013 1302">Sun ONE Application Framework application modules not recognized.</p> <p data-bbox="235 1310 1228 1406">Each Sun ONE Application Framework consists of one or more modules. When restarting the Sun ONE Studio, or occasionally at other times, the current set of application modules are not recognized. Module folders appear as normal Web context folders.</p> <p data-bbox="235 1414 378 1449">Workaround</p> <p data-bbox="235 1458 935 1492">Right-click on the application node, and choose Identify Modules.</p>

ID	Summary
4731755	<p data-bbox="332 225 1149 269">After compilation, the Java Sources display not-compiled red signs.</p> <ol data-bbox="332 277 1163 451" style="list-style-type: none"> <li data-bbox="332 277 735 312">1. Create an Application/ViewBean. <li data-bbox="332 321 506 355">2. Compile All. <li data-bbox="332 364 1163 399">3. Change something at the ViewBean (for example, add a View Component). <li data-bbox="332 407 799 442">4. Compile All (or Compile the ViewBean). <p data-bbox="332 460 878 494">The Java Source still shows a not-compiled red sign.</p> <p data-bbox="332 503 442 538">Solution</p> <p data-bbox="332 546 399 581">None.</p> <p data-bbox="332 590 1249 624">The files are compiled, but the compiled flag is not properly updated. This is harmless.</p>
4734387	<p data-bbox="332 642 1235 703">All application View Components are missing from the Component Browser when restarting the Sun ONE Studio.</p> <p data-bbox="332 711 1278 807">After creating an application, restarting the Sun ONE Studio, and attempting to add view components, the Sun ONE Application Framework component library is not listed in the Component Browser.</p> <p data-bbox="332 815 478 850">Workaround</p> <p data-bbox="332 859 1313 928">All Sun ONE Application Framework Web application file systems must be unmounted, and then mounted again.</p> <p data-bbox="332 937 649 972">The Explorer view is restored.</p>
4739889	<p data-bbox="332 989 1313 1050">The Execute (Force reload) action does not cause a deployment of the WAR file to the Sun ONE Application Server.</p> <p data-bbox="332 1058 1263 1128">This behavior is controlled by the Sun ONE Application Framework and the application server plugin.</p> <p data-bbox="332 1137 492 1171">Workaround</p> <p data-bbox="332 1180 1306 1284">The deployment can be performed from Filesystems/WEB-INF, right-click/Deploy or, from the Sun ONE Application Framework Explorer panel, right-click Application name, and choose Deploy from the menu.</p>
N/A	<p data-bbox="332 1302 1206 1328">Copy/paste of a ViewBean may result in a new ViewBean with an invalid name.</p> <p data-bbox="332 1336 1313 1458">The default copy/paste behavior appends a unique identifier if the pasted file name conflicts with an existing file name in the current directory. Therefore, if <i>FooViewBean</i> is copied and pasted into the same directory, the pasted copy will be named <i>FooViewBean_1</i>. This is an invalid ViewBean name, since ViewBean objects must end in <i>ViewBean</i>.</p> <p data-bbox="332 1466 478 1501">Workaround</p> <p data-bbox="332 1510 1078 1553">Adjust the pasted object's <i>name</i> property to be a valid ViewBean name.</p>

ID	Summary
N/A	<p data-bbox="239 239 915 263">Copy/Paste of a ViewBean does not copy the associated JSP(s).</p> <p data-bbox="239 284 1223 340">This is by design. A given JSP may only be associated with one ViewBean. Therefore, the new ViewBean cannot refer to the same JSP(s) as the original ViewBean.</p> <p data-bbox="239 361 379 385">Workaround</p> <p data-bbox="239 406 1200 487">Use the <i>Associate JSP...</i> action on the new ViewBean's JSPs node to associate an arbitrary JSP file. Then use the <i>Synchronize to ViewBean</i> action on the newly associated JSP to add tags if desired.</p>
N/A	<p data-bbox="239 510 896 534">Auto-execution for Web Service Models results in exception.</p> <p data-bbox="239 555 1178 638">Trying to set a Web Service Model in the list of a View's Auto Executing Models cause an exception at runtime (<i>Model must implement both com.ipplanet.jato.model.DatasetModel and com.ipplanet.jato.model.RetrievingModel.</i>)</p> <p data-bbox="239 659 334 683">Solution</p> <p data-bbox="239 704 1193 788">Web Service Models cannot be auto-executed because they do not implement the RetrievingModel interface. Instead, they must be manually executed during display, or the developer must manually implement the RetrievingModel interface.</p> <p data-bbox="239 808 1162 833">Example code for executing a Web Service Model inside a ViewBean or ContainerView:</p> <pre data-bbox="311 854 1136 968">ExecutingModel model= (ExecutingModel)getModel(MyWebServiceModel.class); model.execute(new SimpleModelExecutionContext("<operation name>"));</pre> <p data-bbox="239 1020 1208 1076">A convenient location to execute this code that mimics auto-retrieving model execution is in the View's beginComponentDisplay() event.</p>

Sun ONE Studio 4 Issues

This section describes the known Sun ONE Studio 4, Enterprise Edition (formerly known as Forte for Java) issues, and the associated solutions.

ID	Summary
4740933	<p>All models and views are missing from the Wizard when restarting the Sun ONE Studio.</p> <p>For existing applications, after restarting the Sun ONE Studio, the models and views are not listed in the wizard's Select Model Type and View Location windows.</p> <p>Solution</p> <p>The file system must be unmounted, and then mounted again.</p>
4745627	<p>JSP page did not compile.</p> <p>There are two problems:</p> <ol style="list-style-type: none"> 1. Compile All does not compile JSP pages. <ol style="list-style-type: none"> a.) Right-click Classes. b.) Choose Compile All. <p>A JSP page is not compiled.</p> 2. The Jasper parser does not check for valid HTML syntax <ol style="list-style-type: none"> a.) Right-click on the JSP page. b.) Choose Compile. <p>Only tag library tags are verified. HTML or other markup is not verified (for example, </html will not be caught by the compiler).</p> <p>When a JSP compiles, the Jasper parser does not check for valid HTML syntax. It only resolves JSP directives.</p> <p>Solution</p> <p>This is the expected behavior. The J2EE container will compile JSPs when they are first accessed. Developers can individually select JSP pages to compile if desired.</p>
N/A	<p>Various application classes not found when executing an application page.</p> <p>When executing a page in the application, the servlet class, ViewBean class, or other application class is not found. This results in an error message in the browser.</p> <p>Solution</p> <p>This problem can occur when the default Java compiler is set to cross-compile class files to a different filesystem than where the Java source files are located. The Sun ONE Studio does not support this configuration for development of Web applications, including Sun ONE Application Framework Web applications.</p> <p>Change the default Java compiler to generate class files in the same directory as the corresponding Java file.</p>

ID	Summary
N/A	<p data-bbox="237 236 1249 265">Error: “Service Class not found” when creating Web Service Model.</p> <p data-bbox="237 279 1249 340">When creating a Web Service Model using the Model Wizard, the wizard fails with the exception <i>Service class not found</i>. The model is not created.</p> <p data-bbox="237 354 1249 383">Solution</p> <p data-bbox="237 397 1249 519">This problem can occur when the default Java compiler is set to cross-compile class files to a different filesystem than where the Java source files are located. The Sun ONE Studio does not support this configuration for development of Web applications, including Sun ONE Application Framework Web applications.</p> <p data-bbox="237 532 1249 595">Change the default Java compiler to generate class files in the same directory as the corresponding Java file.</p>
N/A	<p data-bbox="237 609 1249 638">Cannot create new Sun ONE Application Framework application in new/empty project.</p> <p data-bbox="237 652 1249 682">The Application Wizard cannot be invoked when there are no visible mounted filesystems.</p> <p data-bbox="237 696 1249 725">Workaround</p> <p data-bbox="237 739 1249 843">The Sun ONE Studio does not allow access to the list of available Wizards without a mounted and visible filesystem (which must be selected). Add a dummy filesystem to the project before invoking the New action.</p>

Internationalization Issues

This section describes the known internationalization issues, and the associated solutions.

ID	Summary
4737132	<p data-bbox="237 1150 1249 1180">By default, on all JSP pages, the following is true: charset-ISO-8859-1.</p> <p data-bbox="237 1194 1249 1223">Solution</p> <p data-bbox="237 1237 1249 1338">For internationalization, you may chose an alternate charset such as UTF-8 which allows representation of Unicode charset. (Reference: The JAVA Internationalization book by A. Deitsch & D. Czarnecki.)</p>

Database Issues

This section describes the known Database issues, and the associated solutions.

ID	Summary
4742714	<p>Update action does not work if updating a primary key field.</p> <p>There are no error messages, however the record is not updated.</p> <p>The Key Value is by default <i>true</i> for the primary key field, and this field cannot be updated.</p> <p>Solution</p> <p>It is the responsibility of the developer to set the key value to <i>true</i> for a given index field in the property sheet before executing code.</p> <p>Note: The Sun ONE Application Framework software does not support the auto updating of key fields. Developers must manually supply <i>where</i> criteria to update key fields.</p>
4753563	<p>Update action updates all database rows.</p> <p>When performing an Update Web Action, all rows in the table are modified.</p> <p>Solution</p> <p>This is the expected behavior if no JDBC SQL Model fields are marked as Key fields. The Sun ONE Application Framework software uses the key fields to build a WHERE clause for the update. If no key fields are specified, no WHERE clause is generated, and all records are updated.</p> <p>It is the responsibility of the developer to set the key value to <i>true</i> for a given key field in the property sheet before executing code. Note that when constructing a JDBC SQL Model, only keys that are <i>primary</i> keys are automatically detected.</p>

How to Report Problems

If you have problems with your system, contact customer support using one of the following mechanisms:

- The online support web site at:
<http://www.sun.com/supporttraining/>
- The telephone dispatch number associated with your maintenance contract

Please have the following information available prior to contacting support. This helps to ensure that our support staff can best assist you in resolving problems:

- Description of the problem, including the situation where the problem occurs and its impact on your operation

- Machine type, operating system version, and product version, including any patches and other software that might be affecting the problem
- Detailed steps on the methods you have used to reproduce the problem
- Any error logs or core dumps

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