

# **Application Designer**

## **Installation**

Version 8.4.1

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This document applies to Application Designer Version 8.4.1 and all subsequent releases.

Specifications contained herein are subject to change and these changes will be reported in subsequent release notes or new editions.

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## Preface

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The information in this documentation covers all the steps needed to install Application Designer. It is subdivided into the following topics:

<b>Installation Information</b>	General information on the installation and on the hardware and software prerequisites.
<b>License File</b>	Information on the required license file.
<b>Installation on Windows</b>	Describes how to install Application Designer on Windows.
<b>Installation on UNIX Platforms</b>	Describes how to install Application Designer on UNIX systems.
<b>Installation Scenarios</b>	Information on the different installation scenarios (for example, installation within your own Tomcat environment).
<b>Installing Ajax Developer</b>	How to install the Ajax Developer plug-in in Eclipse.

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# 1 Installation Information

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## Installation Variants

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Application Designer is a software component which is deployed as a web application into a servlet container. You typically add this software component to your existing web applications or you build new web applications around it.

Application Designer is delivered as a web archive file (*.war*). This file needs to be deployed into an existing servlet container.

## Hardware and Software Requirements

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### Client

Software prerequisites:

- See [Supported Browsers](#) below.

Hardware prerequisites:

- PC with 1 GHz or higher and 256 MB main memory for “comfort usage”, or
- corresponding UNIX workstation.

### Server

Software prerequisites:

Microsoft Windows 7 Professional (x86)  
Microsoft Windows 7 Professional (x64)  
Microsoft Windows 8 Professional (x64)  
Microsoft Windows Server 2008 (x86)  
Microsoft Windows Server 2008 (x64)  
Microsoft Windows Server 2012 (x64)  
Oracle Solaris 10  
Oracle Solaris 11  
AIX 7.1 64-bit  
HP-UX 11i v3 64-bit (Itanium)  
Red Hat Enterprise Linux 6 (zSeries 64-bit)  
Red Hat Enterprise Linux 6 for AMD64 and Intel EM64T (x86-64)  
SUSE Linux Enterprise Server 11 (zSeries 64-bit)  
SUSE Linux Enterprise Server 11 for AMD64 and Intel EM64T (x86-64)  
z/OS 1.12  
z/OS 1.13



Application Designer requires a servlet container supporting the Servlet 2.3 specification: Tomcat, IBM WebSphere, BEA Weblogic, JBoss, and others.

Hardware prerequisites:

- PC with one Intel Pentium processor, 1GHz or better, 512 MB main memory or more, and approximately 100 MB available memory on hard disk, or
- corresponding UNIX workstation.

## Supported Browsers

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Application Designer runs on browsers supporting DHTML (HTML and JavaScript) to a certain level. The browsers supporting this level are listed below:

Internet Explorer 10 and 11

Mozilla Firefox Extended Support Release 31 <sup>(1)</sup>

Google Chrome <sup>(2)</sup>

### Notes:

<sup>(1)</sup> Only the Extended Support Releases of Mozilla Firefox are explicitly supported. Due to frequent upgrades of the Mozilla Firefox consumer release, the compatibility of Application Designer with future versions of Mozilla Firefox cannot be fully guaranteed. Possible incompatibilities will be removed during the regular maintenance process of Application Designer.

<sup>(2)</sup> The Google Chrome support is based on Google Chrome Version 31. Due to frequent version upgrades of Google Chrome, compatibility of Application Designer with future versions of Google Chrome cannot be fully guaranteed. Possible incompatibilities will be removed during the regular maintenance process of Application Designer.

You do not have to install any further plug-ins or additional software for these browsers. For example, Application Designer does not require that any kind of Java Virtual Machine is installed on the client side.



## 2 License File

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A license file is required to run Application Designer. You receive the license file when ordering Application Designer at Software AG, or after having registered an evaluation version download.

The license file that you receive for evaluation purposes is only valid for one month after requesting the evaluation license.

The license file (*cit<nn>.xml*) needs to be copied into the following directory:

*<installdir>/tomcat/webapps/cis/cis/licensekey/*



**Note:** After copying the license file, you need to restart Application Designer.



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## Installation on Windows

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## Installing Application Designer

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To install Application Designer, deploy the web archive file *cis.war* into an existing servlet container.

For a Tomcat servlet container, you find the Application Designer web application in the following directory:

```
<install_dir>/tomcat/webapps/cis
```

The web application contains the “typical” web application directories such as *WEB-INF* and *META-INF*. It also contains some additional directories starting with “cis” and the directories *HTMLBasedGUI* and *SWTBasedGUI*.

After Application Designer has been installed, you have to copy the license file to the required directory. See [License File](#).

## Viewing the Demo Workplace

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Start your browser (the supported browsers are listed in the section [Hardware and Software Requirements](#)) and open the following page:

<http://localhost:51000/cis>

If you have defined a different port, enter your port instead of 51000.



**Note:** See also [Supported Browsers](#).

The resulting page contains the following links:

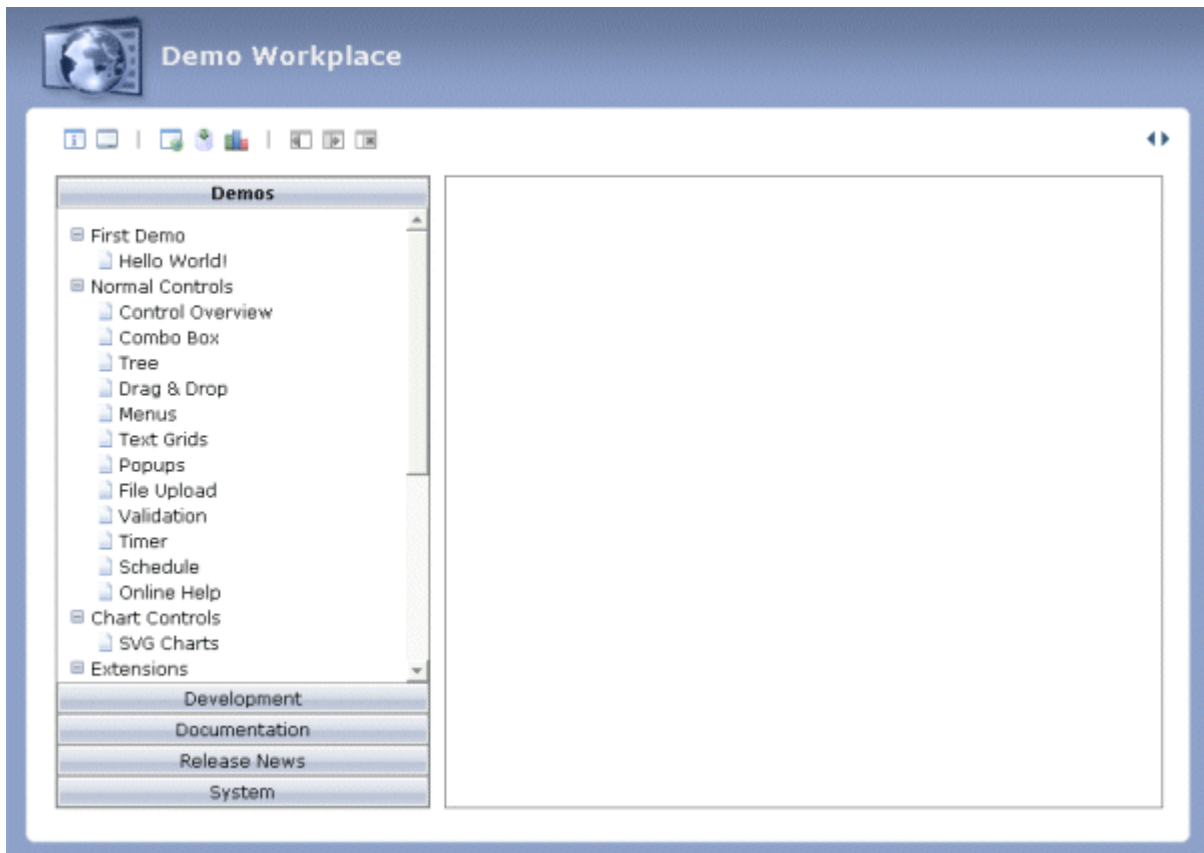
- Demo Workplace
- Development Workplace
- SWT Demos



**Notes:**

1. The link for the development workplace starts the environment in which you create and maintain your graphical user interfaces. See the *Development Workplace* documentation for detailed information.
2. The SWT demos are started in the SWT Java Client via Java Web Start. Using the link for the SWT demos, you can start the same demos as in the demo workplace described below. The only difference is that the demos are shown without using a browser. See also *SWT Client* in the *Special Development Topics* documentation.

When you choose the link for the demo workplace, you see the following page:



From the demo workplace, you can access many example pages, development tools for creating new page layouts, and some system monitoring functions. It is recommended that you first visit the demos before you invoke the development workplace.

## Documentation

The documentation is accessible directly after the installation in the directory `<install_dir>/tomcat/webapps/cis/cisdocumentation`.

You can also access it from the Application Designer workplace. For further information, see *Developer Documents and License Information* in the *Development Workplace* documentation.

## Typical Problems

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### Nothing Works inside the Browser

You only see a blank screen when following the link to the Application Designer workplace. Check whether the execution of JavaScript has been deactivated in your browser's security settings. See also *JavaScript Enabling*.



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## Installation on UNIX Platforms

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This chapter provides information on how to install the web archive file into an existing servlet engine. The web archive for the Application Designer web application is deployable into any servlet container including BEA WebLogic, IBM Websphere, JBoss, Sun IPlanet, SAP Web Application Server, and others.

## Installing the Environment Components

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We assume that you have already installed the environment components on your own:

- J2SE
- Tomcat or any other servlet container

See also: [Hardware and Software Requirements](#).

Contact Software AG support in case of problems when installing these base components.

## Installing Application Designer

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The web archive installation file (*citv<nn>.war* in the \UNIX\CIT directory of the Application Designer CD-ROM) is required for installation. It must be deployed in your application server.

Example for Tomcat:

- Your Tomcat installation has a *webapps* directory in which typically all web applications are installed. Just copy the *citv<nn>.war* file into this directory. Tomcat will automatically extract the file and internally create and start a corresponding web application.

## Viewing the Demo Workplace

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View the demos as described in the Windows installation section [Viewing the Demo Workplace](#).

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## Installation Scenarios

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## Installation within Your Own Tomcat Environment

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Application Designer provides an environment which includes a Tomcat servlet engine and a Java Runtime Environment. Inside this environment, Application Designer is installed as a web application.

Of course, you can also use Application Designer inside your own Tomcat and Java environment. You can use any Tomcat servlet engine from release 4.0 on.

Proceed in the following way:

- Install Application Designer (both environment and Application Designer installation).
- Copy the directory `<install_dir>/tomcat/webapps/cis` into the `webapps` directory of your Tomcat installation.
- In case you have updated the `web.xml` file, adjust the `web.xml` file so that
  - the `cis.home` parameter points to the file directory of the web application, and
  - the `cis.log` parameter points to the log directory.

## Usage with WebSphere

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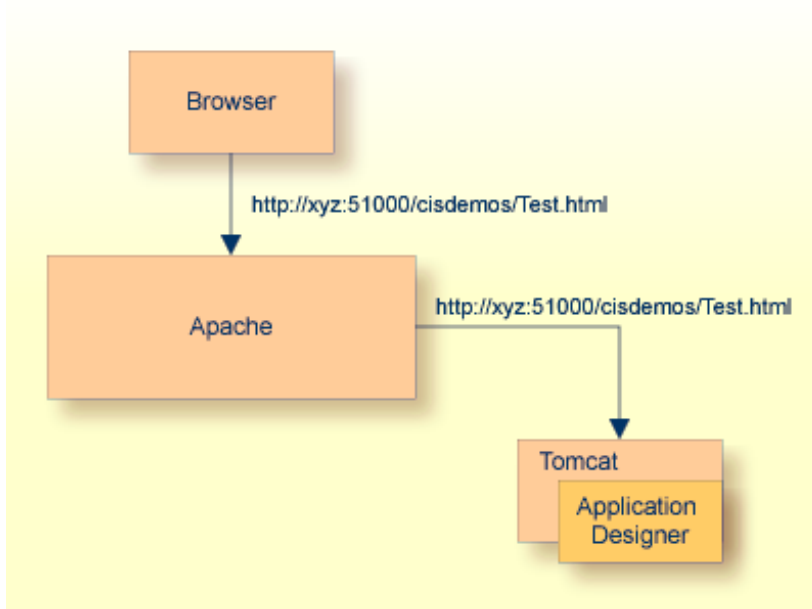
Application Designer is deployed as a web application or part of a web application to Websphere. Proceed in the following way:

- Install Application Designer (both environment and Application Designer installation).
- Build a web archive file (`.war`) by zipping the directory contents of `<install_dir>/tomcat/webapps/cis/` into the file `cisv<nn>.war`. Or use the WAR Packager to create the `.war` file.
- Deploy this `.war` file to Websphere. Adjust the `web.xml` file during deployment as described above if you have changed the file.

## Using Application Designer on Tomcat behind Apache

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This section describes the configuration of the following scenario:



Apache is used as the web server to the outside world. All requests from outside are going through Apache. This means that only one server and one port is opened to the outside (typically the Apache server with port 80). Requests to Application Designer which runs, for example, on Tomcat under port 51000 are going as a “port 80” request to Apache and are routed from Apache as a “port 51000” request to the Tomcat server.

The consequence is that you only have one point for letting outside users into your network. This simplifies the configuration of firewalls.

### Steps

The configuration steps for this scenario are:

1. Install Application Designer just as normal and check whether it is running normally inside Tomcat.
2. Configure Apache to route certain requests to Tomcat/Application Designer.
3. Restart Apache.

## Application Designer Installation

Just perform a normal installation of Application Designer (both environment and Application Designer installation).

## Apache Configuration

Configure the Apache *httpd.conf* file in the following way:

1. Find the following line and activate it by removing the comment letter (#) at the beginning. If it is already active, there is nothing to do for you.

```
LoadModule rewrite_module modules/mod_rewrite.so
```

2. Do the same for the following line:

```
LoadModule proxy_module modules/mod_proxy.so
```

3. Do the same for the following line:

```
AddModule mod_rewrite.c
```

4. Do the same for the following line:

```
AddModule mod_proxy.c
```

5. Search for the configuration lines below and activate them by removing the comment letters:

```
#
# Proxy Server directives. Uncomment the following lines to
# enable the proxy server:
#
<IfModule mod_proxy.c>
    ProxyRequests On

    <Directory proxy:*>
#         Order deny,allow
#         Deny from all
#         Allow from local
        Allow from all
    </Directory>

    #
    # Enable/disable the handling of HTTP/1.1 "Via:" headers.
    # ("Full" adds the server version; "Block" removes all outgoing Via: headers)
    # Set to one of: Off | On | Full | Block
    #
```

```
# ProxyVia On

#
# To enable the cache as well, edit and uncomment the following lines:
# (no cacheing without CacheRoot)
#
# CacheRoot "C:/Programme/Apache Group/Apache/proxy"
# CacheSize 5
# CacheGcInterval 4
# CacheMaxExpire 24
# CacheLastModifiedFactor 0.1
# CacheDefaultExpire 1
# NoCache a-domain.com another-domain.edu joes.garage-sale.com

</IfModule>
```

6. Configure the rewrite module by appending the following lines at the end of the *httpd.conf* file:

```
RewriteEngine On
RewriteRule ^/cis/(.*) http://localhost:51000/cis/$1 [P]
```

This definition routes all incoming requests to Apache, which have certain context roots to the 51000 port. If there is a request to Apache with the URL *http://apache:80/cis/cisdemos/Test.html*, Apache forwards this request to Tomcat with the URL *http://localhost:51000/cis/cisdemos/Test.html*.

### Advantages of this Configuration

The advantage of this type of configuration is that Apache and Tomcat are totally independent from one another. Actually, it is a coupling of two standalone systems. Tomcat is running in a separate process and as a consequence can do everything without disturbing Apache. Intranet applications can still access Tomcat directly via the Tomcat port.

The disadvantage of this scenario is that every request which is going to Apache is routed to Tomcat via a TCP/IP routing - which from the performance point of view is consuming more resources than directly processing the request inside the Apache process.

Of course, more complex configurations are also possible with Apache. This section just described one scenario.





## 6 Installing Ajax Developer

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If you have NaturalONE installed, Ajax Developer is automatically installed.

Ajax Developer is not included in the Application Designer package (that is, it is not part of the delivered web archive file).

