Front Office deployment

CAST AIC Portal is unsupported. We encourage you to **switch** to **AIP Console.**

On this page:

Target audience:

CAST Platform Administrators

Summary: this section provides details about deploying and configuring the "Front Office" components as part of a **secured deployment**.

Introduction

As described in Deployment - security, to deploy CAST AIP securely, the various CAST AIP components are divided into two distinct groups known as **Front** and **Back Office**. A standard CAST AIP installation is described in Installing CAST AIP which you should read and understand. However, this section describes all the **additional configuration** that should be completed for the **Front Office components** (over and above the standard CAST AIP installation) to ensure that the deployment of CAST AIP conforms to security standards.

Delivery folder

The Delivery folder is first and foremost a location used by the **CAST AIC Portal** for storing successive and compressed versions of an application's source code as packaged by the Delivery Manager(s) using the CAST Delivery Manager Tool. In addition, the **CAST Management Studio** also requires access to this **same Delivery folder** so that source code packaged by the Delivery Manager(s) can be acquired and then analyzed.

As such, the **choice of location** for the Delivery folder is extremely important and may impact where the **CAST AIC Portal** is installed.

Please see:

- Source code delivery - an introduction
- Where should the Delivery folder be located

CAST Storage Service

If you decide to use the **CAST Storage Service** (a dedicated database system provided by CAST) to host the **Storage** components (the CAST schemas: Management Service, Analysis Service, Dashboard Service and Measurement Service) instead of using a commercially available (and supported) RDBMS (such as Microsoft SQL Server or Oracle Server), you will need to use a **dedicated physical machine**.

You can deploy the CAST Storage Service either on **Linux** or **Windows**, however, for **security and performance reasons**, it is highly recommended to deploy the CAST storage Service on **Linux**:

- CAST provides a dedicated **Windows installer** (see Install CAST AIP from setup) **for the CAST Storage Service**
- For **Linux environments**, please refer to PostgreSQL for Linux or Docker

Web application server and web applications

The objective is to configure the CAST web applications in accordance with OWASP (Open Web Application Security Project) guidelines. This configuration has been tested by CAST via a security audit. To secure the web applications, you will need to configure:

- The **web application server** on a **dedicated machine** (CAST provides documentation for deployment on Apache Tomcat only. Other web application servers may be compatible (see Supported Platforms), but no documentation is provided).
- Each **web application** (i.e. the CAST AIC Portal, Health Dashboard (HD), Engineering Dashboard (ED) etc.):
    1. Use of **Active Directory/LDAP** authentication methods
    2. Use of the **Audit Trail** to trace end user activities
    3. Secure configuration of back-end **database access** (only relevant for the HD/ED/RestAIP web applications)

Additionally, you can also configure a reverse proxy (using an **Apache web server**) to hide the Apache Tomcat web application server or take advantage of secure access via HTTPS.

Web application server

Before deploying the CAST web applications on the web application server, ensure you configure the web application server as discussed in Common security configuration options for web application deployment. This page details the following security configuration options:

- Configuring the use of secure https protocol with Tomcat for the CAST web applications
- Setting up a Reverse Proxy on Apache web server
- Disabling insecure HTTP methods in Apache Tomcat - webdav
- Disabling weak SSL cipher suites to improve security

Web applications

CAST AIC Portal

Securely configure the CAST AIC Portal as described in CAST AIC Portal - security configuration options. This page details the following security configuration options:

- CAST AIC Portal - Configuring user authentication
- CAST AIC Portal - Configuring the Audit Trail feature
- CAST AIC Portal - Encrypt login and password for LDAP

Health Dashboard - Engineering Dashboard - RestAPI

Securely configure the Health Dashboard / Engineering Dashboard / CAST Rest-API as described in HD - ED - RestAPI - security configuration options. This page details the following security configuration options:

- HD - Configuring user authentication
- HD - Configuring user roles
- HD - Configuring data authorization
- ED - Configuring user authentication
- ED - Configuring user roles
- ED - Configuring data authorization
- HD-ED - Configuring the Log and Audit Trail
- HD-ED - Encrypt login and password for database and LDAP

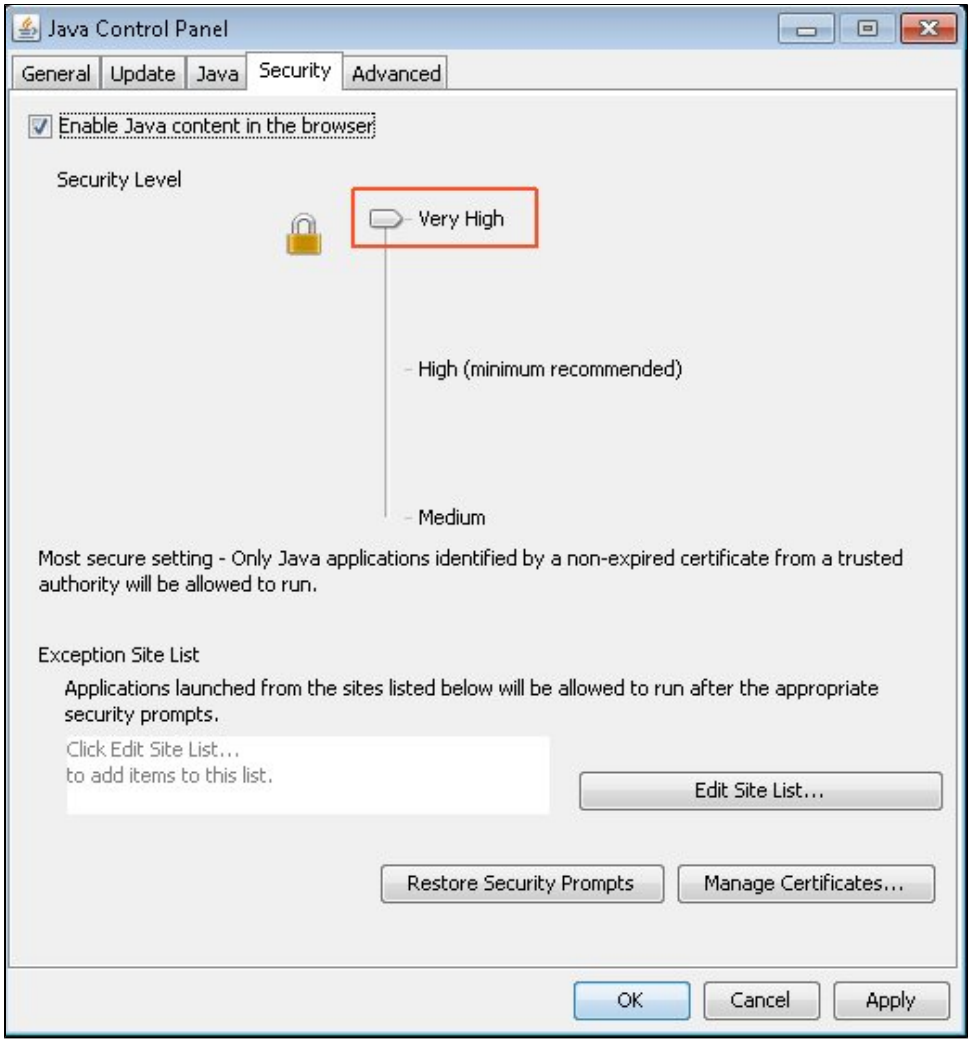
End-users / Delivery Managers and the CAST Delivery Manager Tool

The **CAST Delivery Manager Tool** is a standalone end-user tool that entirely manages the discovery, selection, extraction and delivery of source code ready for analysis in the CAST Management Studio. The CAST Delivery Manager Tool will be **prevented** from being downloaded from the CAST AIC Portal to a workstation if the following **Java JRE settings** available in the **Java Control Panel** are **all enabled**:

Security tab

Security Level set to Very High

Java 7	Java 8

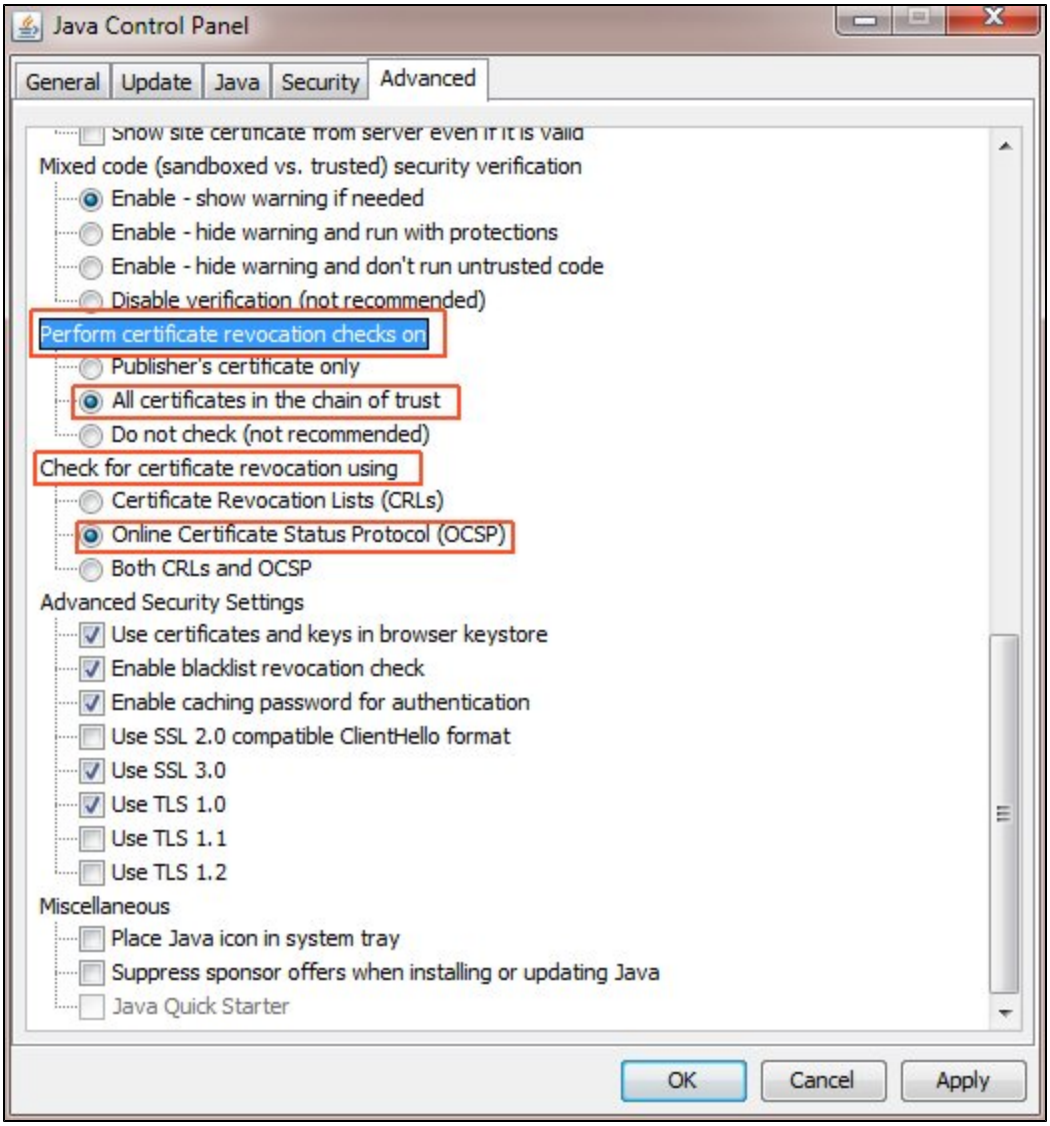


Advanced tab

- **Perform certificate revocation checks on** is set to **All certificates in the chain of trust**

AND

- **Check for certificate revocation using** is set to **Online Certificate Status Protocol (OCSP)**



Recommended settings

CAST recommends that ONE of the following settings is used instead:

- Set the **Security Level** to **High**

OR

- Set **Perform certificate revocation checks on** to **Publisher's certificate only**

OR

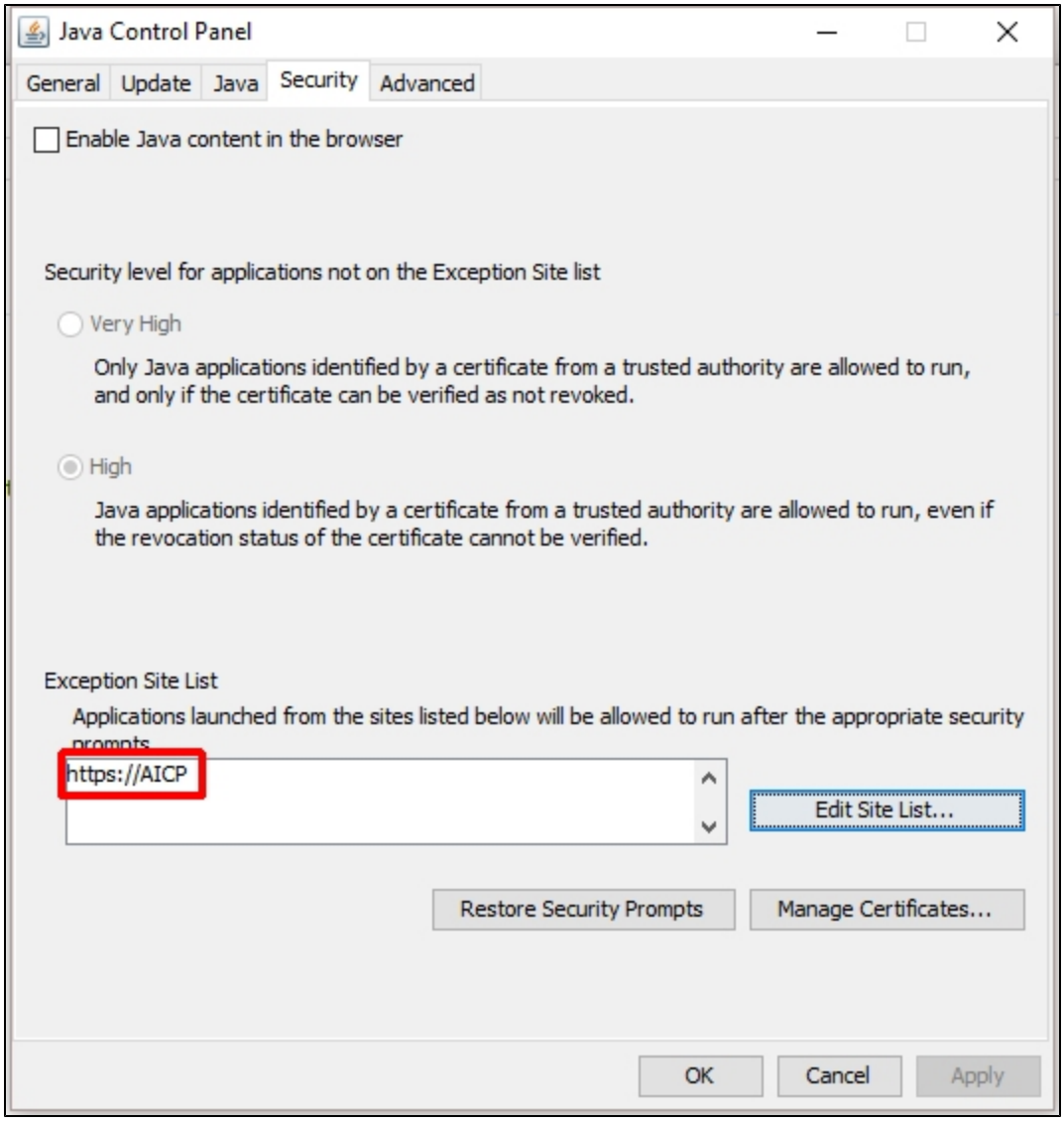
- Set **Check for certificate revocation using** to **Certifcate Revocation Lists (CRLs)**

OR

- Set **Check for certificate revocation using** to **Both CRLs and OCSP**

OR

- Put the CAST AIC Portal's **URL** into the **Exception Site List** in the (**Security tab** of the **Java Control Panel**):


Java Control Panel
General
Update
Java
Security
Advanced
Enable Java content in the browser
Security level for applications not on the Exception Site list
Very High
Only Java applications identified by a certificate from a trusted authority are allowed to run, and only if the certificate can be verified as not revoked.
High
Java applications identified by a certificate from a trusted authority are allowed to run, even if the revocation status of the certificate cannot be verified.
Exception Site List
Applications launched from the sites listed below will be allowed to run after the appropriate security prompts.
https://AICP
Edit Site List...
Restore Security Prompts
Manage Certificates...
OK
Cancel
Apply