Deployment - sizing and security

On this page:

Target audience:

CAST Administrators

ⓘ **Summary**: this cookbook provides IT Infrastructure experts with the information they need to plan a deployment of the CAST Application Intelligence Platform.

Introduction

To prepare the deployment of CAST AIP you must first understand the platform functional architecture (see Overview of CAST Application Intelligence Platform). Thereafter, this section helps you to understand the CAST AIP deployment process and configuration, as well as helping you to select the target deployment scenario that best meets your organization's business and operational objectives.

Deployment overview

This section explains the high level deployment of CAST AIP. In very simplistic terms, a typical medium/large/enterprise deployment of CAST AIP can be divided up into the following "areas".

ⓘ Note that the diagram below shows a **medium/large/enterprise deployment** (see Hardware sizing considerations below), however, CAST AIP can also be deployed on **one single machine**, if the environment and analysis expectations are **small**.
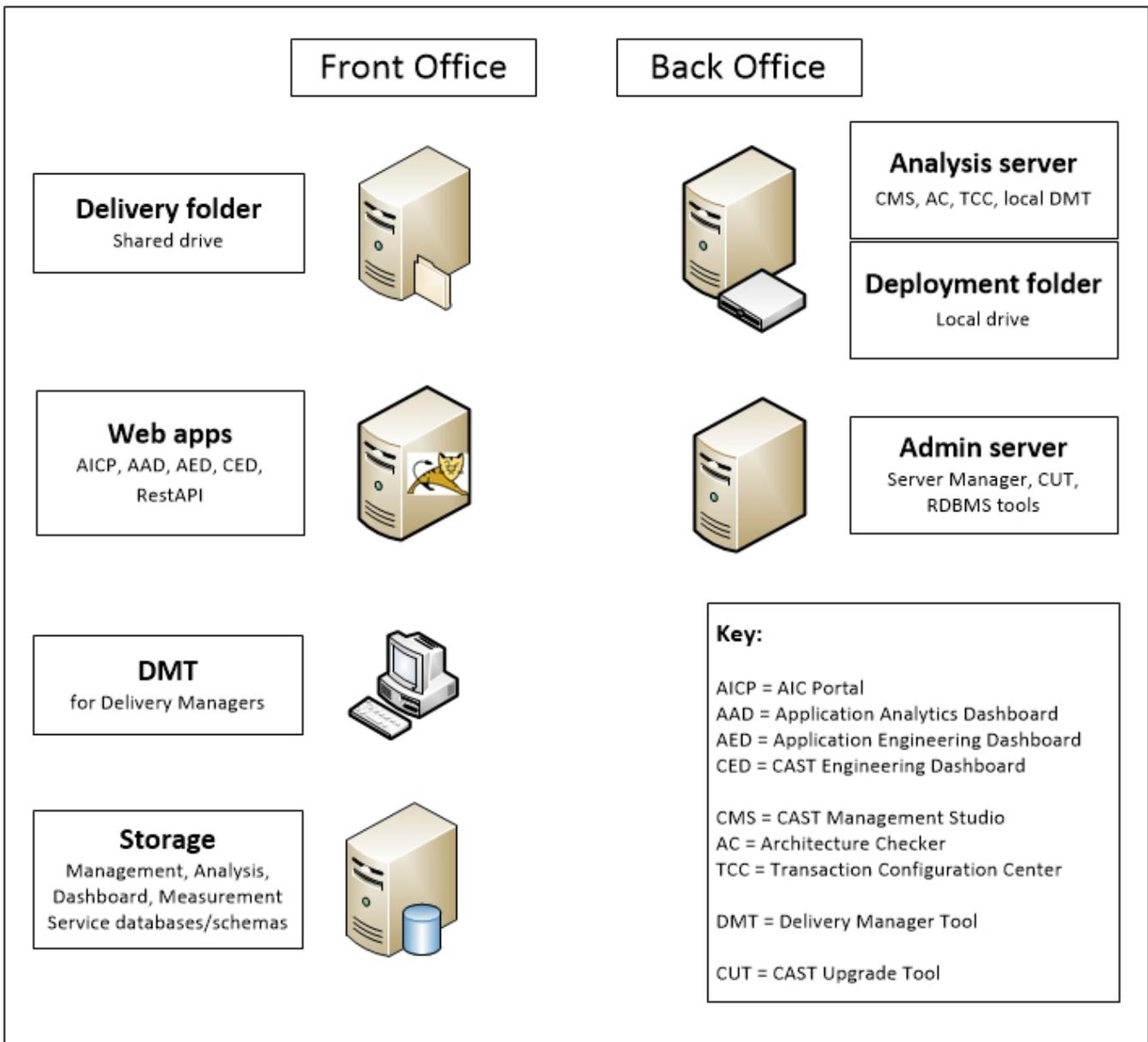
Front Office

The **Front Office** of CAST AIP is composed of a set of components that are used either to **deliver the source code**, **store** and **access analysis results**.

Who uses these components?

Components	Delivery Managers	Consumers/end-users	Administrators
CAST AIC Portal (AICP) CAST Delivery Manager Tool (DMT)	✅	✅	✅ Only during setup
Web apps	❌	✅	✅ Only during setup
Storage	❌	❌	✅

Delivery Folder, Web apps, DMT (Delivery Manager Tool)

- **Delivery folder**: a storage location for source code deliveries
- A set of **web applications**:

- **CAST Application Intelligence Portal** (AICP) / **CAST Delivery Manager Tool** (DMT): for managing the delivery of source code for analysis
- **CAST Application Analytics Dashboard** (AAD), **CAST Application Engineering Dashboard** (AED) and **CAST Engineering Dashboard** (CED): all used to investigate the source code analysis results, each targeted at a different consumer profile

Please refer to the following topics to understand the **Source Code delivery process** and to consider the location of the Delivery folder which is required by the CAST AIC Portal and the CAST Management Studio:

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

Storage

This area comprises the CAST AIP databases/schemas known as the **Management**, **Analysis**, **Dashboard** and **Measurement Services**. These databases/schemas are used to store data generated by the CAST Management Studio (i.e. analysis and snapshot result data). In general, components are hosted on one dedicated machine via the use of the **CAST Storage Service** or a commercially available and supported **RDBMS instance**. Storage components must be made available to the components in the **Back Office** area, either directly (same machine) or via a network.

- The **CAST Storage Service** is a pre-packaged PostgreSQL RDBMS offered as part of the CAST AIP Windows installer setup - it is not mandatory to use this.

Back Office

The **Back Office** of CAST AIP consists of a set of **Client/Server (C/S) tools** installed by the CAST AIP setup on one or more Windows machines:

Who uses these components?

Components	Delivery Managers	Consumers/end-users	Administrators
Analysis Server/Deployment folder	❌	❌	✅
Admin Server	❌	❌	✅

Analysis Server/Deployment folder

- the end-user applications (**CAST Management Studio, CAST Architecture Checker, CAST Transaction Configuration Center** etc.) - components are installed to a designated workstation/server called the "Analysis Server". Components update the **CAST AIP databases /schemas** in the Storage area.
- the **Deployment folder** is used to store delivered and accepted source code for analysis purposes

Admin Server

- **Server Manager** and the **CAST Update Tool (CUT)** used for installation and upgrade purposes respectively
- **CSS / RDBMS management tool**: PGAdmin (for CSS) or equivalent management tool for supported RDBMS

Hardware sizing considerations

When planning a deployment of CAST AIP, considerable attention must be paid to the **hardware** on which CAST AIP will run, whether this is **one single machine** for a small deployment or **multiple machines** for Medium/Large/Enterprise deployments. Sizing hardware can be difficult, as the requirements depend on many variables, such as the number of applications and the size of the source code to be analyzed, the number of end-users (consumers) that will be consulting the results and the specific deployment constraints within the environment.

CAST provides guidelines in Deployment - sizing, which can help you make the necessary decisions.

Security considerations

Together with hardware sizing, IT infrastructure experts also need to take into account **security considerations** when deploying CAST AIP. In an age where systems are distributed across LAN and even WAN connections, security is a top priority. CAST AIP can be installed **one single machine** for a small deployment or **multiple machines** for Medium/Large/Enterprise deployments - both scenarios require that due consideration is given to deploying CAST AIP in a secure way, whether by deploying on a virtual infrastructure and only allowing access over Remote Desktop, or using a highly secure platform such as XenApp and deploying CAST AIP within it.

CAST provides guidelines in Deployment - security, which can help you make the necessary decisions.