

Balanced Insight

Business Intelligence by Design™



Balanced Insight Consensus®

Easy Install - Installation Guide

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Product Information

This document applies to Balanced Insight Consensus® Version 4.2 and may also apply to subsequent releases. Please contact your Balanced Insight® representative or support to check for newer versions of this document.

The Balanced Insight Consensus® Easy Install is an all-in-one distribution of Consensus that includes:

- JRE 1.6
- Apache Tomcat 6.0
- Consensus Server – Consensus web application
- Consensus Help – Help web application
- Consensus Insight - Analytics web application
- Consensus Server Configuration Utility
- Consensus Database Migration Utility

The Balanced Insight Consensus® Easy Install is ideal for customers looking to deploy Balanced Insight Consensus® on Windows and who are not tied to an existing application server.

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Introduction

This document is intended for use with Balanced Insight Consensus® 3.3 (“Consensus”). Consensus is a Web-Based Business Intelligence Lifecycle Management Solution with integrated requirements, design, deployment, approval, and classification features. This document provides the information you need to install and configure Consensus.

Audience

To use this guide, you should be familiar with:

- Application Server Concepts
- Database Concepts

Related Documentation

Our documentation includes release notes and user guides that meet the needs of our varied audience. The following documents contain related information and may be referred to in this document.

Document	Description	Location
Balanced Insight Consensus Users Guide	The User Guide is an essential resource for users of Balanced Insight Consensus. The User Guide contains a bounty of business and technical information on the implementation of Balanced Insight Consensus.	Online Help http://www.balancedinsight.com/help/
Balanced Insight Consensus Administrators Guide	The Administration Guide is an essential resource for administrators of Balanced Insight Consensus. The Administration Guide contains a high level overview of how to configure and administer Balanced Insight Consensus.	Online Help http://www.balancedinsight.com/help/

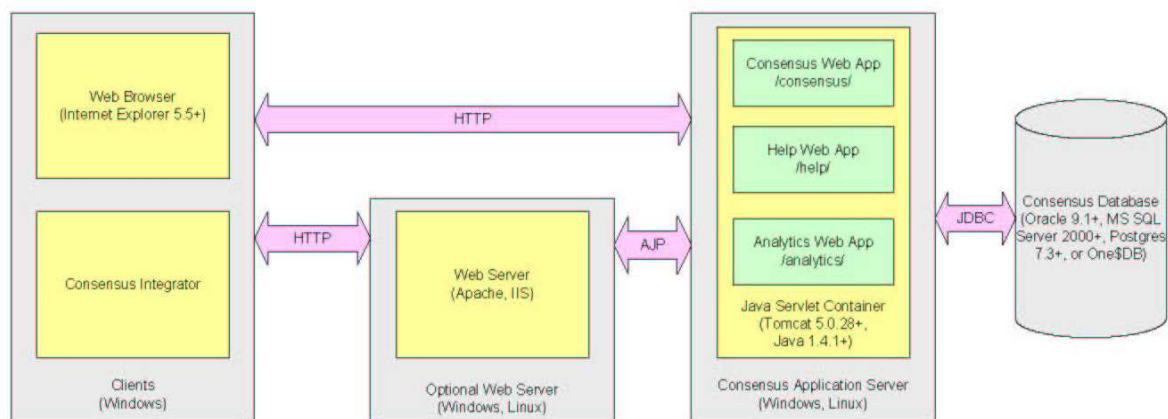
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Balanced Insight Consensus®

This guide describes how to install and configure Balanced insight Consensus® 3.3 (“Consensus”) on a single computer. Consensus is a Web product for defining requirements, designing solutions, generating technical components, and automating life-cycle processes for Business Intelligence environments. Consensus includes server and integration components. Only the components provided with Consensus and installed by default are described in this guide. For more detailed information about installing and configuring dependent components, such as *Third Party Components*, that are not detailed within this guide, see the documentation provided with those components.

Component Architecture



Server Components

The Consensus Server Components provide the user interfaces for exploring, contributing, reviewing, approving, and publishing Business Intelligence Lifecycle Project Artifacts. Additionally the server functionality provides functionality for notifying users regarding work to be performed and capturing key metrics associated with your lifecycle process. The Server Components include the following:

- **Consensus Database** – manages the storage of customer application data including security, configuration data, models, terminology, and classification schemes. This application data is leveraged by Consensus to design, deploy, manage, and integrate Business Intelligence Solutions. By default the Consensus Database is an instance of a One\$DB in memory relational database. Consensus should be configured to leverage a Microsoft SQL Server, Oracle, or Postgres database in production environments.
- **Consensus Server** – (also known as Consensus Web App) provide the primary user interfaces for exploring, contributing, reviewing, approving, and publishing Business

Intelligence Lifecycle Project Artifacts; in addition to the interfaces for administering and configuring your Consensus environment.

- **Consensus Insight Server** – (also known as Analytics Web App) manages the capturing of key metric data from Consensus to enable users performing oversight and management roles, such as Facilitators, Stewards, and Administrators. The Consensus Insight Server will present this key metric data to users in a multidimensional format enabling ad-hoc analytics to determine lifecycle durations by artifact type and progress of review processes.
- **Consensus Help Server** – (also known as Help Web App) manages the access, searching, and navigation of online guides provided with Consensus including the User Guide and Administration Guide.

Integration Components

The Consensus Integration Components provide wizards and native interfacing technologies to generate and deploy business intelligence solutions in the most popular business intelligence technologies. The Integration Components include the following:

- **Consensus Integrator™** – is a client side application that will interface with the Consensus Server to rapidly deploy Business Intelligence Solutions in a number of industry leading environments. The Consensus Integrator will work with various adapters (listed below) to enable the generation of the complete set of architectural components required by a Business Intelligence solution including the database layer, the OLAP layer, and the BI Tool Semantic Layer. In many instances the Consensus Integrator provides bi-directional support for the environments of key business intelligence solution artifacts -- enabling the deployment (export to) and reverse engineering (import from).
- **BusinessObjects Adapter** – an adapter that enables the integration of Consensus with BusinessObjects Designer. BusinessObjects Designer is a tool that enables you to create and maintain an easy-to-use interface that shields end users from the data complexities. The BusinessObjects Designer is leveraged to define the key data structures users require access to and build out a semantic layer (BusinessObjects Universe) that presents the data structures in a business context. The Consensus-BusinessObjects Adapter will create BusinessObjects Universes (along with expected data structures) from the business intelligence artifacts captured and maintained within Consensus.
- **CA ERwin Data Modeler Adapter** – an adapter that enables the integration of Consensus with CA ERwin® Data Modeler. ERwin is a data modeling solution that enables you to create and maintain database models. Consensus will create and read ERwin XML files that contain the definition of database schemas (tables and columns) ERwin enables your database architects and modelers to model and generate across a plethora of database

environments including Microsoft (Access, SQL), IBM (DB2, Informix), Oracle, Sybase (Adaptive Server, SQL Anywhere), and Teradata; to name a few.

- **Cognos Adapter** – an adapter that enables the integration of Consensus with Cognos Framework Manager. Cognos Framework Manager is a tool that enables you to create and maintain a common infrastructure across all Cognos capabilities for scorecarding, planning, and business intelligence. Framework Manager is leveraged to define the key data structures users require access to and build out a semantic layer across all data sources which you desire to provide users access to. These data structures are then incorporated into an insulation layer that presents the data structures in a business context. The Consensus-Cognos Adapter will create Framework Manager Projects (along with expected data structures) from the business intelligence artifacts captured and maintained within Consensus.
- **Apache DDLUtils Adapter** – an adapter that enables the integration of Consensus with the Apache DB Project's DDLUtils product. DDLUtils is a small, easy to use component for working with Database Definition Files (DDL). Consensus will create and read DDLUtils XML files that contain the definition of a database schema (tables and columns). DDLUtils is leveraged to take these XML representations of the source or target database schemas and translate them to native DDL formats for databases supported by IBM (DB2), Microsoft (SQL200/SQL2005), Oracle, Sybase (Adaptive Server), MySQL, Hypersonic SQL, PostgreSQL.
- **Microsoft Adapter** – an adapter that enables the integration of Consensus with Microsoft Business Intelligence through the generation of a Unified Dimensional Model (UDM) and associated physical components (SQLServer Analysis Services Cubes and SQLServer Relational Databases). The Consensus-Microsoft Adapter will create SQLServer Tables & Views and SQLServer Analysis Services Cubes from the business intelligence artifacts captured and maintained within Consensus.
- **Pentaho Adapter** – an adapter that enables the integration of Consensus with Pentaho Analysis (previously known as Mondrian) and Pentaho Metadata to be used with their reporting tool WAQR. Pentaho Analysis is an Open Source Business Intelligence Solution that provides sophisticated OLAP capabilities. The Consensus-Pentaho Adapter will create Pentaho Analysis OLAP models from the business intelligence artifacts captured and maintained within Consensus. Pentaho WAQR is a Web-based, Ad-hoc, Query and Reporting tool that allows users to create formatted reports. Consensus will generate the Pentaho Metadata necessary for WAQR.

Third Party Components

In addition to the tools provide with Balanced Insight Consensus®, the following third party components are required.

- **Relational Database (Postgres, Oracle, SQL Server)** – Consensus requires a relational database to store its information. It is not necessary that the database be located on the same server as Consensus. Consensus supports the following database platforms for your production environments:
 - Microsoft SQL Server 2000 and greater
 - Oracle 9i and greater
 - Postgres 8.x and greater

Installing and Configuring Balanced Insight Consensus® Server on Windows

This section provides the information you need to install and configure Balanced Insight Consensus®. Please follow the instructions found in the following sections:

- Pre-Installation Checklist
- Pre-Installation Configuration Setting Decisions
- Obtain your Consensus License
- Download the Software from Balanced Insight
- Install the Consensus Server
- Setup your 3rd Party Relational Database
- Apply your Consensus License
- Configure Consensus
 - o Database
 - o TCP Ports
 - o Environment (Optional)
 - o SMTP (Optional)
 - o SSO (Optional)
 - o SSL (Optional)
- Setup Consensus as a Windows Service
- Running and Accessing Consensus
- Installing a notification template (Optional)
- Fronting Consensus with IIS (Optional)

Pre-Installation Checklist

Before you install Consensus, ensure that your computer(s) meet the software and hardware requirements. The hardware requirements will depend on your Consensus environment. You may require additional resources; the checklists below identify minimum requirements as well as recommended minimum configurations.

Required Hardware (Application Server)

	Minimum	Recommended
Memory	1 GB	2 GB
CPU	One 2+ GHz CPU	Two 2+ GHz CPUs
Disk	5 GB	10 GB

Required Hardware (Database Server)

Minimum	Recommended Minimum
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Disk	1 GB	5 GB
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Required Software

- Windows 2000, XP, 2003
- A decompression utility (winzip or 7-zip - <http://prdownloads.sourceforge.net/sevenzip/7z432.exe?download>)

Pre-Installation Configuration Setting Decisions



Technical Configuration

	1st Environment	2nd Environment
Instance		
Name	TEST	PROD
Instance # of Host		
If # > 1: Suffix		
Host		
Server Name		
IP Address		
Operating System		
# of CPUs		
Memory		
Drive		
Disk space		
Path		
Database		
Type		
Host		
Port		
Name		
User		
Password		
Mail Server		
Host		
Port		
Authentication: Yes/No		
YES: User		

YES: Password		
TCP IP Configuration		
HTTP Port		
AJP Port		
Shutdown Port		
OneDB Port (only if using OneDB)		
HTTPS Port (only if using SSL)		
SSO		
SSO: Yes/No		
YES: Method (WINS, HEADER, IIS)		
WINS: Server(s)		
WINS: Windows Domain:		
HEADER: Header Name		
IIS: Windows Domain:		
SSL		
SSL: Yes/No		
Keystore:		
Keystore Password:		
Keystore Type (JKS):		
Keystore Alias (if necessary):		
SSL Protocol (TLS):		

Obtain your Consensus License

You will need to obtain a Consensus license for each host that will be running the Consensus Server. Please contact support@balancedinsight.com with the name and IP address of your host(s) to obtain the appropriate license.

Download the Software from Balanced Insight

You will need a user account on the Balanced Insight website to download the Consensus Server. You will also need to have a special permission granted to your user account.

If you do not have a user account, please create one here:

<http://www.balancedinsight.com/user/register>

After your user account has been created (or if you already have one) please send an email to support@balancedinsight.com to have the “Consensus Releases” role added to your user account.

Once your user account has been setup, you will be able to download the Consensus Server here:
<http://www.balancedinsight.com/products/download>

Install the Consensus Server

The Balanced Insight Consensus® Easy Install is distributed as a single zip file. It is recommended that you create a main directory for Consensus to be installed into: For example: c:\Consensus.

Unzip the Consensus_x.x.x.x.zip (x.x.x.x is your version you are installing) into your main Consensus directory. You should now have Consensus installed in c:\Consensus\Consensus_x.x.x.x.

Please read the README-FIRST.txt file to become familiar with the distribution.

You can optionally test the installation up to this point by:

- Running the ‘easy-ConsensusServerInDOSWindows.bat’ – this will start the Consensus Server in a DOS Window – it usually takes about 30 seconds to start – the DOS Window will remain open
- Double clicking on the ‘Consensus on 8585.Ink’ to open the URL <http://localhost:8585/> in Internet Explorer
- Follow the links to login to the Desktop or Administration using a predefined user (consensus)
- Once completed, Close the DOS window to shutdown the Consensus Server

Setup your 3rd Party Relational Database

You should already have a Microsoft SQL Server, Oracle, or Postgres database created. To create the necessary Consensus tables – run the appropriate script found in the extras\db folder.

The default database only has a single user defined and only the Administrator Role has been given to them. The username for this system defined user is ‘system’ and the password is ‘system’.

Apply your Consensus License

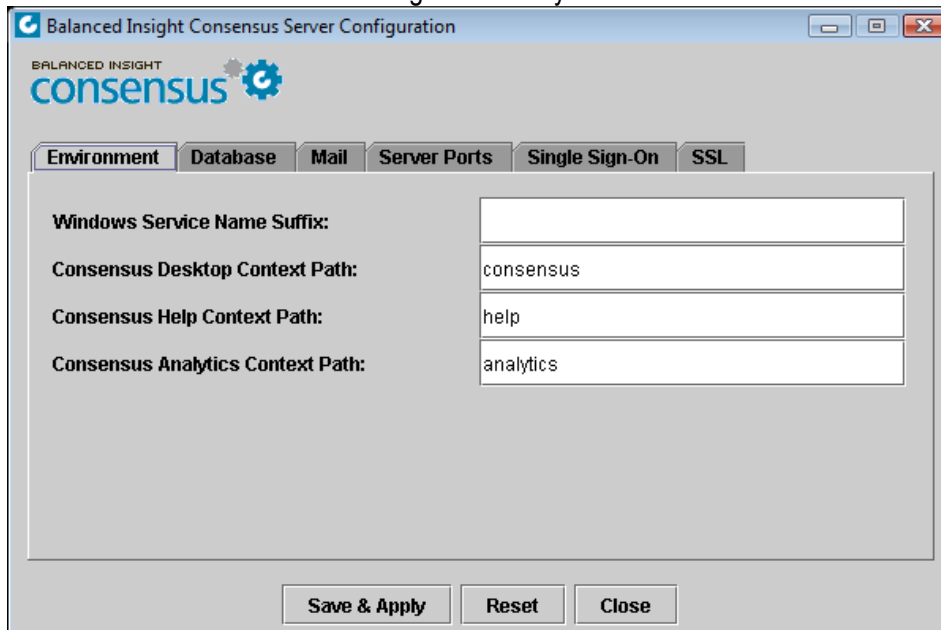
Place your consensus.license file received from Balanced Insight in your root folder of your Consensus Installation. For example: c:\Consensus\Consensus_x.x.x.x.

You will be replacing the trial license that comes with the Easy Install.

The Consensus Server Configuration Utility copies the license from the root directory into the location that Consensus looks for the file.

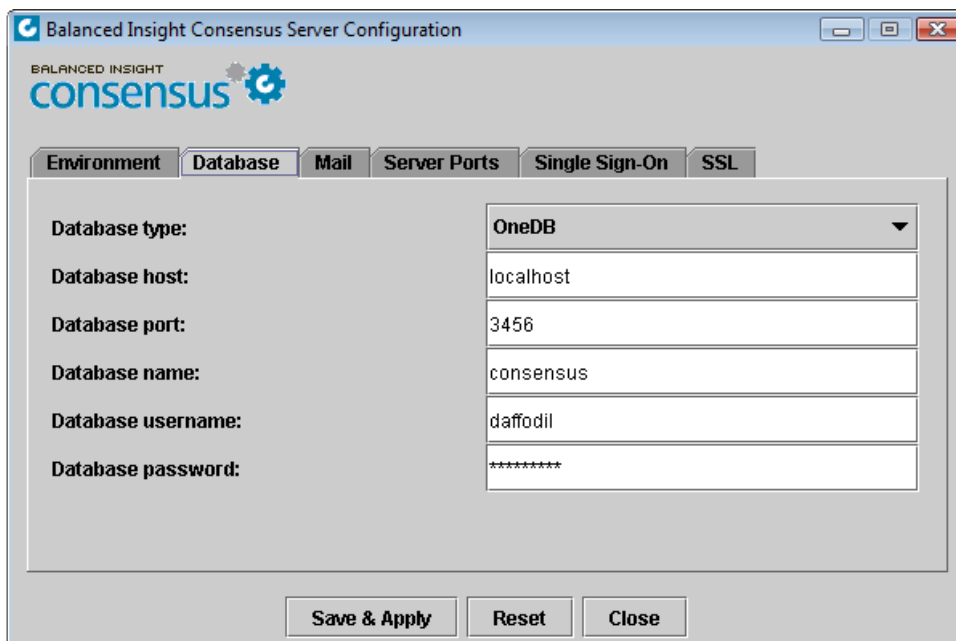
Configure Consensus

To Configure Consensus you will need to run the 'configure-ConsensusServer.bat' file. This will launch the Consensus Server Configuration utility.



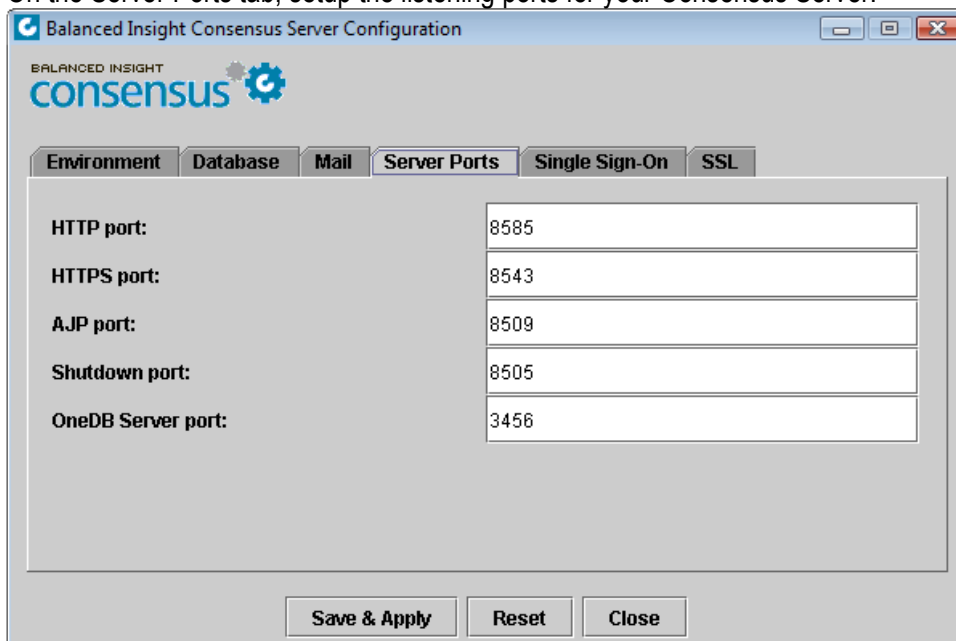
Database

On the Database tab, setup your database type, name, username and password information.



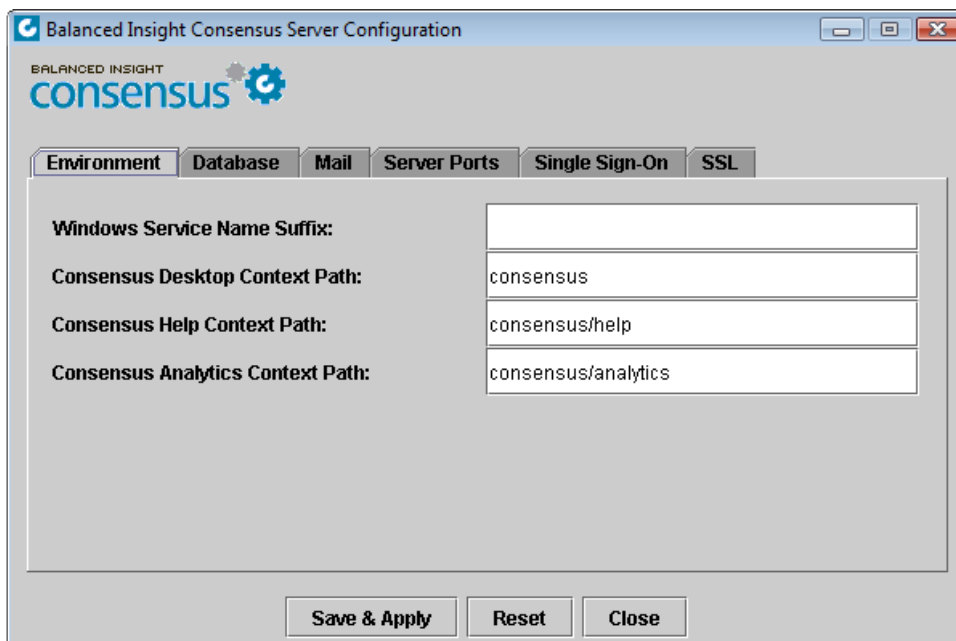
TCP Ports

On the Server Ports tab, setup the listening ports for your Consensus Server.



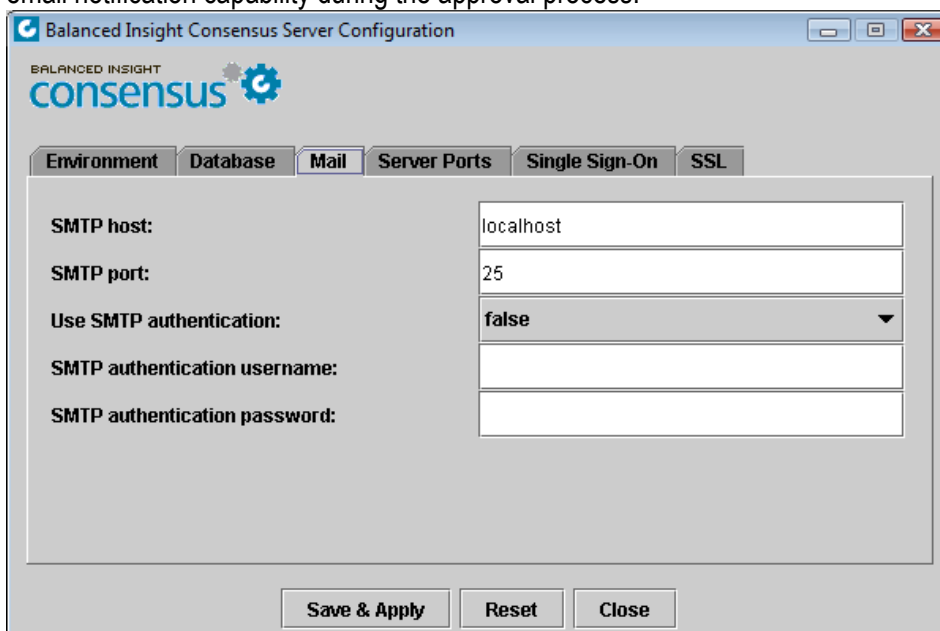
Environment (Optional)

On the Environment tab, you can configure a suffix name of the Consensus Windows Service (so you can install more than one on the same host) as well as the URL Paths that the web applications will be accessible from.



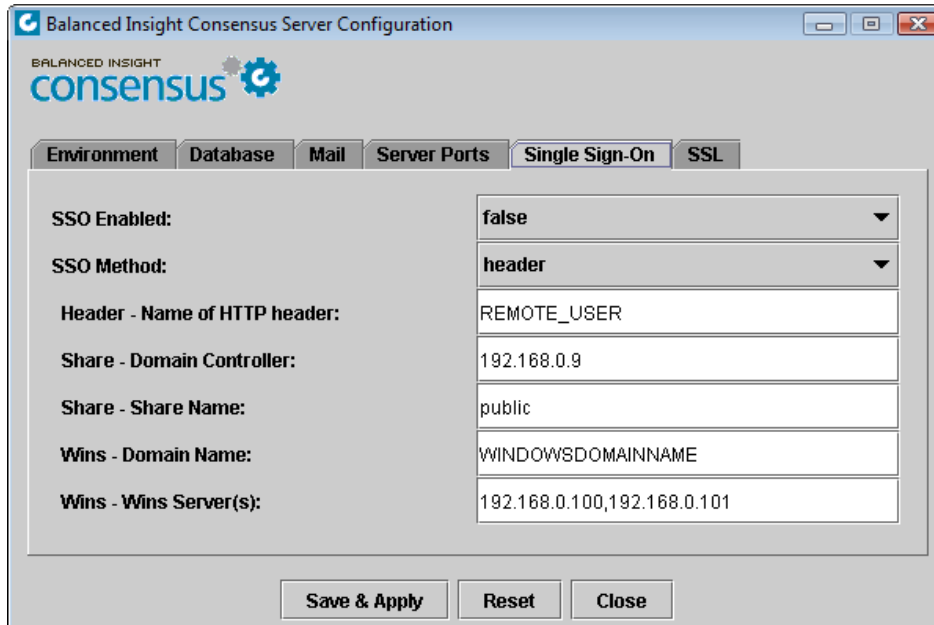
SMTP (Optional)

On the Mail tab, configure your SMTP settings. This is necessary if you are planning on using the email notification capability during the approval process.



SSO (Optional)

On the Single Sign-On tab, you can configure the Consensus Server to integrate with your existing authentication environment. If you are using a SSO Method of iis, wins, or share you will need to define users in Consensus with the Windows Domain as a prefix, for example: WINDOWSDOMAIN\JOHN.



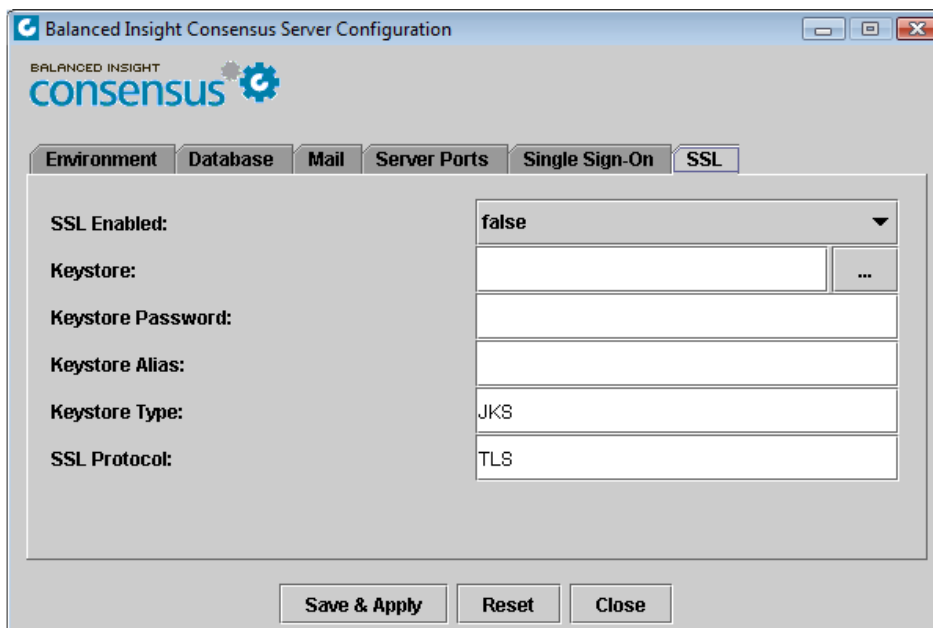
The screenshot shows the 'Balanced Insight Consensus Server Configuration' window with the 'Single Sign-On' tab selected. The configuration fields are as follows:

Field	Value
SSO Enabled:	false
SSO Method:	header
Header - Name of HTTP header:	REMOTE_USER
Share - Domain Controller:	192.168.0.9
Share - Share Name:	public
Wins - Domain Name:	WINDOWSDOMAINNAME
Wins - Wins Server(s):	192.168.0.100,192.168.0.101

Buttons at the bottom: Save & Apply, Reset, Close.

SSL (Optional)

On the SSL Tab, you can enable the Tomcat Server to listen on the HTTPS Port (defined on the Server Ports tab). If you need to generate a keystore – use the 'advanced\configure-Create-SSL-Cert.bat' file.



Setup Consensus as a Windows Service

To Install Consensus as a Windows Service you will want to familiarize yourself with the following batch files:

- service-ConsensusEdit.bat – Once the Service has been installed – you can use this batch file to configure its settings. The most important setting is the amount of memory allocated to the Service (On the Java tab). 512 MB is recommended setting, however Consensus will run with the default of 256 MB. Also, you might want to consider making the service start 'Automatically' instead of 'Manually'.
- service-ConsensusInstall.bat – Installs Consensus as a service – the Service name is 'Balanced Insight ConsensusXxXxXx<SUFFIX> (Apache Tomcat)' where XxXxXx represents your version and <SUFFIX> is your service suffix as defined on the Environment Tab of the Consensus Server Configuration utility.
- service-ConsensusMonitor.bat – Creates a systems tray icon that allows to stop and start the server from your system tray.
- service-ConsensusRemove.bat – Uninstalls the Consensus Service.
- service-ConsensusStart.bat – Starts the Consensus Service – You can also use Control Panel->Administrative Tools->Services in windows.
- service-ConsensusStop.bat – Stops the Consensus Service – You can also use Control Panel->Administrative Tools->Services in windows.

Running and Accessing Consensus

When the Balanced Insight Consensus Service is running it will be accessible from URLs assembled by the known settings from the Consensus Server Configuration utility.

The format of the URL should be:

http://<host_name>:<http_port>/<consensus_web_app_context_path>/

or

https://<host_name>:<https_port>/<consensus_web_app_context_path>/

If all of the defaults were accepted you could use the following sample:

<http://localhost:8585/consensus/>

or

<https://localhost:8543/consensus/>

The default database only has a single user defined and only the Administrator Role has been given to them. The username for this system defined user is 'system' and the password is 'system'

Fronting Consensus with IIS

At times, customers will want to front Apache Tomcat with IIS.

Typical reasons customers chose to take advantage of this type of configuration are:

- Performance – Let IIS handle all of the native HTTP calls
- Single Sign On – Let IIS handle the NTLM authentication
- Convenience – IIS is already installed and configured on port 80
- SSL – You would like IIS to take care of the SSL instead of Tomcat

You can find detail instructions on this configuration by following the document `extras\isapi_redirect\isapi_redirect Howto.doc`.

Installing a notification template

If you are going to be taking advantage of Consensus ability to notify Approvers they have item for their review, you will need to install a template.

Follow these instructions to setup a template:

- With Consensus running, login to the Administration module.
- Select Templates from the Administration menu
- Select the existing template and click Modify
- Check 'Active' to make the template active
- Check the days of the week you want emails to be sent out – it's typically recommend to be no more than two days per week
- Optionally change the 'Subject' and 'From Address'
- Copy the text found in 'extras\notification templates\Generic Notification Template.vm'
- Paste the text into the 'Template Text' field
- Optionally uncomment and update the HREF attribute on the A element for the 'Click here to start Consensus' hyperlink

- Towards the bottom – you can search for the ‘Click here to start Consensus’ text to find it
- Click ‘Save’

Troubleshooting

If any problems arise, you can review the log files found in the ‘apps\apache-tomcat\logs’ directory. This directory can be accessed quickly using the ‘maintenance-ViewLogDirectory.bat’ batch file.

If you need additional assistance, contact support@balancedinsight.com.

Installing and Configuring Balanced Insight Consensus Integrator™ on Windows

This section provides the information you need to install and configure Balanced Insight Consensus Integrator™.

The Balanced Insight Consensus Integrator™ is a client side application that will interface with the Consensus Server to rapidly deploy Business Intelligence Solutions in a number of industry leading environments. The Consensus Integrator will work with various adapters to enable the generation of the complete set of architectural components required by a Business Intelligence solution including the database layer, the OLAP layer, and the BI Tool Semantic Layer.

The Consensus Integrator™ should be installed on the same machines in which BI Semantic Authoring Tools are installed. For example:

- Microsoft SQL Server’s Business Intelligence Visual Studio
- Cognos Framework Manager
- Business Objects Universe Designer
- Pentaho Metadata Editor

Downloading the Consensus Integrator™

You can download the Consensus Integrator from the Balanced Insight website. You will need to have a user account to perform this download.

The Consensus Integrator™ can be downloaded here:
<http://www.balancedinsight.com/products/download>

Installing the Consensus Integrator™

Download and run the Consensus Integrator installation executable appropriate for your version of Consensus Server. When the installation wizard opens, click the 'Next' button and specify the install location (or leave the default). Click the 'Next' button and specify the Start Menu folder name (or leave the default). The product will now install and give you the option to launch Consensus Integrator for the first time. Consensus Integrator will be automatically associated as the default program for Consensus Studio's export file types.