

IssueNet Deployment Guide

Document ID: Q000056

Last Revised On: Saturday, July 22, 2006

This article applies to the following:

Component(s):

Administrator

Architect

Client

Web Service

License Service

Solutions(s):

All

Summary

As a collaborative application, IssueNet provides several services which must be configured properly for an enterprise to take advantage of its full capabilities. The IssueNet platform can be configured a number of different ways but configuration typically follows a basic set of steps that provide for a simple and successful deployment.

This article describes the order and the steps involved in deploying an IssueNet solution. If you have general questions about the IssueNet platform or the specific IssueNet solution you attempting to deploy, please visit the IssueNet Products section of our web site.

A typical deployment starts with installation of the shared services, and proceeds to creation of the database and configuration of client access following these steps:

1. [Understanding the IssueNet Infrastructure](#)
2. [Planning the IssueNet Infrastructure](#)
3. [Installing the IssueNet Platform Services](#)
4. [Creating the IssueNet Solution Database](#)
5. [Configuring Client Access using IssueNet Central](#)
6. [Providing the Initial Structure for Issues and Tasks](#)

The IssueNet platform is not complex but it does have a basic set of services that must be running to provide the features and functionality in a flexible and supportable fashion. The basic services are;

- A database to maintain the IssueNet data.
- A notification service to process messages based on your IssueNet notification rules.
- A web service to provide client access to the IssueNet solution across the internet.
- A license service to authenticate client access to the IssueNet solution.

For an IssueNet client to successfully operate, the client must be able to address these services and have the security privileges to access them.

IssueNet applications communicate with several different services during operation. These services include the database where the information is persisted, the license server where the user is authenticated, and Microsoft Messaging Queue (MSMQ) from which notifications are sent. Additional services may be required as well depending on the solution.

Each of these services implies both a security relationship and the ability to address the computer between the connecting application and the computer fulfilling the service. In most cases these relationships are very simple to configure and manage, but in enterprise environments with large numbers of users these relationships may be more complex. To simplify configuration and provide access to a wide variety of users both on and off a network, IssueNet uses a web service connections which place issues of authentication and access into a common shared portal for data and service fulfillment.

Planning the IssueNet Infrastructure

An IssueNet solution can run all the required services from a single machine or each service may be deployed separately. The decision to use more than one machine is typically driven by either scalability or security considerations. Any service can be moved at anytime by updating the configuration information in the database using the IssueNet Administrator. Considerations when moving different services will be defined in specific service sections below.

The basic hardware requirements to get the IssueNet platform up and running are very light. The ultimate number of users, amount of information, and configuration of solution will drive the true hardware requirements. Feel free to ask your Elsinore Sales representative for advice when you have a complete understanding of your requirements.

The IssueNet platform can install SQL Server Express for use as the database management system if you do not already have a licensed instance of SQL Server available. SQL Server Express is adequate for small teams but a full SQL Server instance will be required as your team grows. If you use SQL Server Express initially, you can always move the data to a SQL Server instance if and when you require it.

Once you have IssueNet installed, Elsinore strongly recommends creating at least one database loaded with sample data by using the IssueNet Assistant. Have a sample database in addition to your production database is an invaluable aid in learning how to use the features of your solution as well as a sandbox for testing your own configuration ideas.

Installing the IssueNet Platform

The IssueNet platform installer is used to deploy the services required for a complete IssueNet environment. You may install all the IssueNet services on the same computer or you can distribute the different components based on your own network considerations. IssueNet services can be moved at a later time as your situation warrants. Be aware that if you move the IssueNet License Service after activating your licenses you will need to contact Elsinore to reactivate the licenses on the new computer.

Several IssueNet solution components are web services and require IIS 5.0 or greater. Make sure that your web server has the correct features enabled that allow web services to run. Several security lockdown procedures can disable web services entirely. All IssueNet web services can use standard http or https protocol on any port. By default they use http on port 80. If you change this, you must remember to specify the correct protocol and port when you set the service location in the IssueNet configuration settings for those services.

To see details on how to install the IssueNet Solution platform, [click here](#).

To see troubleshooting tips for IssueNet web services, [click here](#).

License Service

The IssueNet License Service is used to validate whether a particular user is licensed to use an IssueNet client component. IssueNet licenses are activated and administrated through the IssueNet Administrator. The IssueNet Administrator does not need to be installed on the same machine as the IssueNet License Service but the service does need to be URL addressable.

To see details on how to activate licenses and configure the IssueNet License Service, [click here](#).

Notification Service

The IssueNet Notification Service is used to process IssueNet Notification Actions triggered by item updates or workflow rules. IssueNet notifications use MSMQ technology to perform their operations. MSMQ will need to be installed on the computer that runs the IssueNet Notification Service.

To see details on how to configure the IssueNet Notification Service, [click here](#).

IssueNet Web Service

IssueNet client applications can connect to an IssueNet database either through a direct connection or a web service connection. Elsinore strongly recommends using a web service connection for deployment within the organization as it simplifies maintenance and provides greater accessibility for users.

The IssueNet Web Service is used to access the IssueNet database. The IssueNet Web Service manages the relationship between the IssueNet License Service and IssueNet Notification Service which simplifies the client applications access requirements.

To see details on the IssueNet Web Service and other connection considerations, [click here](#).

LDAP Configuration

The IssueNet platform supports user administration through Active Directory through a set of LDAP options that can be set for each IssueNet solution database. These options can ease the administration requirements for adding users and maintaining contact information. For the LDAP options to succeed, LDAP must be accessible from the security context of the IssueNet connection.

To see details on LDAP Configuration options, [click here](#).

Creating the IssueNet Solution Database

An IssueNet solution database is created through the IssueNet Assistant which combines the steps of database creation, solution specification, connection creation, and loading of sample data. The IssueNet platform supports multiple solutions within the same database which allows for cross relation of information between solutions such as HelpDesk and Software Defect Tracking. IssueNet solutions are not licensed by database so you may create as many databases as you need for your organization.

IssueNet solution databases can also be created using the IssueNet Administrator by selecting the **Tools | Database | New Database...** menu option before logging on to any solution.

To see details on how to use the IssueNet Assistant, [click here](#).

Configuring Client Access Through IssueNet Central

IssueNet Central provides a [ClickOnce](#) deployment package to allow users to launch the rich client interface from a URL without running an installation package. ClickOnce handles IssueNet assembly versioning and ensures the correct .NET platform is installed. When upgrades to IssueNet are published through IssueNet Central, client computers automatically receive the latest update the next time they launch the application.

IssueNet Central can be configured so client applications receive a centrally administrated number of IssueNet solution connections, simplifying deployment.

Providing the Initial Structure for Issues and Tasks

IssueNet eases the navigation of your issues and the tasks required to resolve them by providing a convenient folder mechanism that issues are submitted under. You can create a folder hierarchy that can aggregate similar issues together based on how your organization understands their issues. When you decide that an issue must be resolved you execute the workflow that defines how to resolve that issue for your organization. This workflow will generate the required tasks and assign those tasks to the correct project and resources.

The final step before deployment of the IssueNet solution to all the end users is to create the basic folder structure to submit issues under and at least one project with the related workflows and resources that can resolve those issues through tasks.

To see details on defining the folders, projects, and resources for your organization, [click here](#).

Additional Resources

[IssueNet Workflow Fundamentals](#)

[Web Service Security Configuration](#)

[MSMQ: Frequently Asked Questions](#)
