Sitecore E-Commerce

Multiple Sites with SEEE

Installation and Configuration Guide

Introduction

With Sitecore CMS, it is possible to have multiple sites running on a single Sitecore instance. Different sites may be largely - if not entirely - unrelated to each other. In the case of e-commerce sites, the e-commerce engines would need to be completely separated. This manual explains how to configure Sitecore E-Commerce Enterprise Edition so that each Sitecore site can have a separate SEEE database.

How it works

The core of SEEE is the e-commerce database. Multi-server support requires a single Sitecore server be able to communicate with multiple e-commerce databases. This is accomplished by having Sitecore dynamically determine the connection string to the e-commerce database.

For every request Sitecore handles, the `httpRequestBegin` pipeline is executed. Multi-server support adds the `Sitecore.SEEE.Multitenant.CommerceDbResolver` processor to this pipeline. The purpose of this processor is to determine which connection string should be used to connect to the e-commerce database, and to set this value in a location where the SEEE application can access it.

Installation

Starting with Sitecore E-Commerce Enterprise Edition version x, multi-site support is included in SEEE. If you are running an earlier version, you will need to install a Sitecore installation package.

This installation package contains the following files:

File	Description
bin\NHibernate.Helper.dll	Previous versions of this assembly were hard-coded to use the connection string named "InSite.Commerce". This updated assembly uses a value in the `System.Web.HttpContext.Items` collection ("EnterpriseCommerceConnectionString") in order to determine which connection string to use.
bin\Sitecore.SEEE.Multitenant.dll	This assembly contains the logic that determines which connection string should be used based on the inbound HTTP request.
App_Config\Include\ Sitecore.SEEE.Multitenant.config	Configuration file.

Configuration

Multi-site support for SEEE is configured in the *Sitecore.SEEE.Multitenant.config* file.

Mappings

The section `/configuration/sitecore/seee/configuration/mappings` defines the mapping of a host name to a connection string. This makes it possible to specify that a specific host should use a specific SEEE database.

Each mapping is defined in a separate tag under `.../seee/configuration/mappings`. The name of the tag does not matter, as long as it is:

- unique under the `.../seee/configuration/mappings` node
- a valid XML node name

The following is an example of what multiple mappings look like:

```xml
<mappings hint="list:AddMapping">
  <site1
type="Sitecore.SEEE.Multitenant.ConnectionStringMapping, Sitecore.SEEE.Multitenant
">
    <HostPattern>site1</HostPattern>
    <ConnectionStringName>Sitecore.Commerce.Site1</ConnectionStringName>
  </site1>
  <site2
type="Sitecore.SEEE.Multitenant.ConnectionStringMapping, Sitecore.SEEE.Multitenant
">
    <HostPattern>site2</HostPattern>
    <ConnectionStringName>Sitecore.Commerce.Site2</ConnectionStringName>
  </site2>
  <default
type="Sitecore.SEEE.Multitenant.ConnectionStringMapping, Sitecore.SEEE.Multitenant
">
    <ConnectionStringName>Sitecore.Commerce.Standard</ConnectionStringName>
    <IsDefault>true</IsDefault>
  </default>
</mappings>
```

Each mapping contains the following values:

Name	Description	Sample values
HostPattern	The pattern that the current hostname will be compared to in order to determine if the mapping applies. Values are not case-sensitive. A valid .NET regular expression is required here.	yourhost yourhost.com yourhost*
ConnectionStringName	The name of the connection string that should be used if the current hostname matches the HostPattern value. The value must match the name of a connection string defined in App_Config/ConnectionStrings.config.	
IsDefault	Indicates if this mapping is the default mapping, meaning that this mapping is used if no other mapping matches. Only one mapping should be specified as the default mapping. If more than one mapping is specified as the default mapping, the first mapping that is defined as the default mapping will be used as the default mapping. This value is optional.	true false

Default mapping patterns

It is very unlikely that the section /configuration/sitecore/seee/configuration/ defaultMappingPatterns will need to be modified.

If the HostPattern value for a mapping is set to one of the values defined in the defaultMappingPatterns section, the mapping will be considered to be the default mapping.

These values are used by the class Sitecore.SEEE.Multitenant.SeeeConfiguration to determine if a mapping is the default mapping.

Troubleshooting

This section describes how to diagnose problems with multi-site SEEE installations.

Logging

The *Sitecore.SEEE.Multitenant.CommerceDbResolver* processor writes to the main Sitecore log file every time it runs. The logging level that is active on your Sitecore instance will determine which messages actually get written. The following information is logged, and can be used to troubleshoot:

Log level	Sample message	Description
ERROR	CommerceDbResolver: Unable to determine SEEE connection string name (host: testserver)	The current hostname cannot be mapped to a connection string. This means no mappings were defined in the config file, or no default mapping was specified. The current hostname is included.
INFO	CommerceDbResolver: Setting SEEE connection string to 'Sitecore.Commerce1' (host: myhost, using default value)	The default mapping is being used for the current hostname. This is because none of the mappings explicitly matched the current hostname. The current hostname is included. The name of the connection string that is being used by the default mapping is included.
INFO	CommerceDbResolver: Setting SEEE connection string to 'Sitecore.Commerce1' (host: localhost, matched pattern: localhost)	A mapping was found that matches the current hostname. The current hostname is included. The name of the connection string that applies for the mapping is included. The pattern that was matched is included.