



TIBCO Statistica®

Data Entry Administration

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The TIBCO Product Documentation website is updated frequently and is more current than any other documentation included with the product. To access the latest documentation, visit <https://docs.tibco.com>.

Product-Specific Documentation

Documentation for TIBCO Statistica® is available on the [TIBCO Statistica® Product Documentation](#) page.

The following documents for this product can be found on the TIBCO Documentation site:

- *TIBCO Statistica® Release Notes*
- *TIBCO Statistica® Installation*
- *TIBCO Statistica® Quick Reference*
- *TIBCO Statistica® Product Traceability*
- *TIBCO Statistica® Configuration for Windows Server 2019*
- *TIBCO Statistica® Data Entry Administration*
- *TIBCO Statistica® Server Administrator's Guide*
- *TIBCO Statistica® Options Configuration*
- *TIBCO Statistica® R Integration: Features and Options*
- *TIBCO Statistica® Security Guide*

The following documents for TIBCO® Data Science for TIBCO Spotfire® Analyst can be found on the [TIBCO Documentation site](#):

- *TIBCO® Data Science for TIBCO Spotfire® Analyst Release Notes*
- *TIBCO® Data Science for TIBCO Spotfire® Analyst User Guide*

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- *TIBCO® Data Science Service for TIBCO Spotfire® Release Notes*
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- For creating a Support case, you must have a valid maintenance or support contract with TIBCO. You also need a user name and password to log in to <https://support.tibco.com>. If you do not have a user name, you can request one by clicking Register on the website.

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Overview

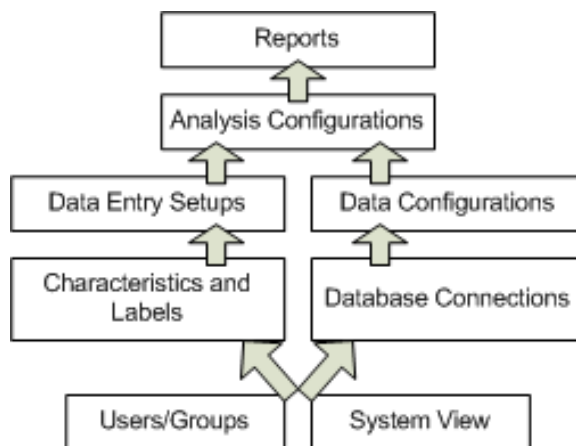
Statistica Data Entry Server is installed on a Windows server. The administrator can configure two types of users.

- First user can author the web forms and author analytic workspace that analyze the manually entered data. This work is saved in Statistica metadata store (database).
- Second user can consume the web form to manually enter data. This work is saved in Statistica metadata store (database).

These web forms are created, configured, versioned, approved, modified with the Statistica Enterprise Manager application. This application is the administrator's user interface for the metadata store (database).

This means that the user entering manual data in a web form and the user creating the web form are connected to the same metadata store.

Understanding the objects (metadata) managed with Statistica Enterprise Manager application is a useful starting place. The following image shows the relationships between these different objects.



Statistica Data Entry Objects

The following objects are used to create web forms.

- **Characteristics:** Numeric fields for a web form
 - **Example:** pH, this is measured in numbers varying from 0-14.
- **Labels:** Text or date data for a web form
 - **Example:** Lot Number, this could be an alphanumeric value - AB01234.
- **Data Entry Setups:** Groups of characteristics and labels configured with specific User/Group permissions to collect the appropriate data using a web form
- **Data Entry Setup Sequences:** Grouping and ordering of Data Entry Setups

In the Statistica Enterprise Manager application, data entry administrators create the web forms (Data Entry Setups) and save them in the System View folder. By using these Data Entry Setups, users gain access to enter data and approve entered data.

You can also group multiple Data Entry Setups together and order within the Data Entry Setup Sequence. After the setup is done, the sequence guides you from one form to the next during data entry.

Open a browser in Internet Explorer, Chrome, or Firefox and visit the URL to use the data entry forms, such as [http://\[servername\]/dataentry](http://[servername]/dataentry). If you are using Internet Explorer 11, switch to compatibility mode.

Installation

Statistica Data Entry Server has the following components (applications and services), installed on the same server:

- The Statistica and Statistica Enterprise Manager applications, create and test web forms, ad hoc analysis, analysis templates (workspaces)
- License Manager service
- Data Entry Server, web service

Software requirements for installing the Statistica software:


- Internet Explorer, Chrome, Edge, or Firefox installed on client computers
- IIS with ASP.NET configured for ISAPI and CGI
- Net 3.5 SP1, and .Net 4.6.1
- Administrator login account/password for the database server



Installation tips and observations:

- Choose to create a new database during installation or to use an existing Enterprise database.
- Typically Statistica Enterprise Server and Statistica Data Entry Server use the same database.
- Statistica Data Entry Server supports Oracle or SQL server.
- The server runs a FlexLM license service after the software installation is completed.

Definitions

Explanation of some important terms used in Statistica.

Term	Definition
Analysis Configuration	<p>Settings within Statistica Enterprise Manager that control the analysis of data, including IQC, SVB, Ad hoc, and R configurations.</p> <p>Permissions: Users who create Analysis Configurations must have the Analysis Admin (AADM) permissions.</p> <p>Typical work flow:</p> <ol style="list-style-type: none"> 1. Author: An analyst, data scientist, engineer, or project lead creates the configuration. This configuration can be a code or no-code workspace. 2. Consumer: <ul style="list-style-type: none"> • A business user logs in to WebStatistica (job server) to execute the configuration on demand. • The configuration is scheduled to execute every 10 minutes to see if a process is out of specification limits, which triggers an alarm by sending an email. • An external application calls the configuration. If this configuration is a workspace then it can also be executed through a Spotfire Data Function. <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="border-left: 1px solid black; padding-left: 10px;"> <p>These configurations can also be executed to generate reports.</p> </div> </div>
Data Sample	<p>Data that has been entered into a web form is known as a sample or record, or can be referred to as data sample or data record.</p>

Term	Definition
Data Verification and Approval	<p>The following methods can be used for reviewing, approving, and electronically signing data that has been entered:</p> <ul style="list-style-type: none"> • Approval of sample <ul style="list-style-type: none"> – One person enters data. – Second person manually reviews entered data and approves or rejects data. • Blind data entry, manual approval <ul style="list-style-type: none"> – Two people enter the same data. – The system compares the two samples. – A third person logs in to the system and reads report about the differences between the two samples. – A third person approves or rejects the data. • Blind data entry, automatic approval <ul style="list-style-type: none"> – Two people enter the same data. – The system compares the data. – The SYSTEM user approves or rejects the data. This user is created by the installation process and cannot be deleted.
Double Blind Data Entry	<p>Also known as blind data entry</p> <ul style="list-style-type: none"> • Two people enter the same data. • The accuracy of the data entry is verified by comparing the two different records.
Characteristic	<p>Numeric data to be collected for analysis, such as pH.</p> <div style="display: flex; align-items: center;">  <div style="border-left: 1px solid black; padding-left: 10px;"> <p>To verify the numeric data and improve the accuracy of data entry, set up reasonable lowest and highest limits on a Data Entry Setup (web form).</p> </div> </div>
Concurrent License Manager	<p>The Statistica Enterprise application is used by administrators to identify who is using the analytical or data entry components, and the number of licenses currently in use.</p>
Configuration or Object	<p>Objects managed with Statistica Enterprise Manager, such as Data Configuration.</p>
Database Connections	<p>Settings (OLE DB or ODBC provider, login name, password) that control the connection to the database.</p> <div style="display: flex; align-items: center;">  <div style="border-left: 1px solid black; padding-left: 10px;"> <p>You must have Database Admin access permissions to create these connections. This access must be given to only the key employees such as IT administrators.</p> </div> </div>

Term	Definition
Data Configuration	<ul style="list-style-type: none"> • Settings (SQL and filtering criteria) that control querying data. • Grant Data Admin (DADM) permission to users who create data configurations. • Create the Database Connection prior to creating the Data Configuration. • Create this Data Configuration prior to creating an Analysis Configuration. • Access permission must be granted to users who need to access raw data to run this configuration.
Data Entry Setup	Groups of Characteristics and Labels configured with specific User/ Group permissions to collect the appropriate data for particular scenarios. It creates and controls the web forms that the data entry staff use.
Data Entry Setup Sequence	<p>It can also be referred to as a Sequence. Administrators use this to change the order of web forms.</p> <p>Example: Data must be entered on the Monday form before data is entered on the Tuesday form.</p>
Data Entry (DE)	<p>Data entry user permission</p> <p>Example: A user with this permission can open http://[servername]/dataentry with Internet Explorer and start entering data.</p>
Data Entry Approver (DEAPPRV)	Users with this access permission can open http://[servername]/dataentry with Internet Explorer and approve data or request data revisions.
Data Entry Admin (EDE)	Data entry administrator user permission that allows creating characteristics, labels, and data entry setups.
Historical Edit (HEDIT)	Historical edit user permission that allows editing data after it has been marked Complete .
IQC (Interactive Quality Control)	A type of Analysis Configuration.
Label	<p>Text or date data elements on a Data Entry Setup (web form) that allow traceability.</p> <p>Example: Lot Number</p>

Term	Definition
Metadata	<p>Data that describes other data, managed by the Statistica Enterprise Manager</p> <p>Two types of metadata.</p> <ul style="list-style-type: none"> • Metadata used to describe or classify data. This type of metadata can be captured with a Label on a web form, or can be a Data Entry Setup's name or a System View Folder's name. <p>Example: A process can be upstream or downstream.</p> • Metadata used to describe information saved within the configurations. <p>Example: A Database Connection contains metadata on how to connect to database type (Oracle, SQL Server, Access, and flat file), login account, and password.</p>
Override (OVR)	Override user permission, typically provided to expert users only, lets you override the reasonable values that are defined on a Characteristic.
Piece	A type of characteristic or label that can have multiple entries per sample (batch).
QC	Quality Control
Statistica	This application is used for ad hoc analysis and authoring analytic templates (workspaces). When Statistica is installed on a server, users can access it by using RDS or Citrix. Statistica can also be installed on a client computer.
Statistica Enterprise Manager	This application is installed with Statistica. It is the user interface to manage the metadata store. It uses role-based security to manage who is allowed to view, create, modify or delete objects such as database connections, data configurations, data entry setups, and analysis configurations.
Statistica Query	This utility application is installed with Statistica and Statistica Enterprise Manager. This utility application is used to easily access data from a wide variety of databases (including many large system databases such as Oracle, MS SQL Server, and Sybase) using Microsoft's OLE DB or ODBC conventions.
Statistica Data Entry Server	<p>This product is also known as DES. Users log in to the server using a browser. They select a web form and then manually enter data. The URL for this server is http://[server-name]/dataentry. https can also be used.</p> <p>Administrators can build web forms with Statistica Enterprise Manager and publish them to specific users for data entry.</p>
SVB	The Statistica Visual Basic (SVB) programming language is a super-set of the industry standard Visual Basic language.

Term	Definition
System View	The folder structure defined in the Statistica Enterprise Manager application to organize the storage of configurable objects. A Data Entry Setup object is saved in a folder in the System View.
URL	Uniform Resource Locator. The address of a web page on the World Wide Web.
WebStatistica	This component is included in the TIBCO Statistica Server product. It is an analytic job server.

Unique Values for a Label

A label that contains a unique value must be a sample label.

Examples of Unique Values

- Batch ID
- Lot ID
- Locator record
- Transaction number

Configuring a label object to contain a unique value prevents duplicate data entry.

Example

1. You manufacture a drug in three batches; A, B, C.
2. Data has been entered for all three batches.
3. Someone tries to enter data for batch A again.
4. The system displays an error.

A unique value is also needed for double-blind data entry. Blind data entry requires two people to enter the same data record. The system needs to know that two specific records must be compared.

Three methods for identifying a label as unique:

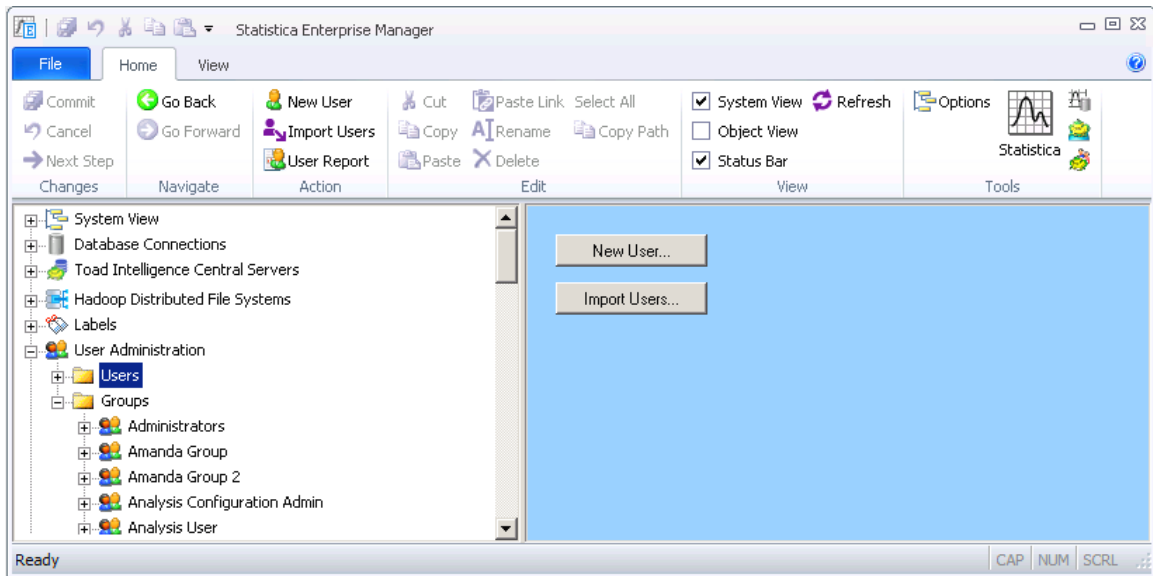
- **Method One:** Select **Require approval of samples** as the approval type on the **Data Entry Setup**. For configuration details, read Data Entry Setup that now requires a unique value.
- **Method Two:** Select **Blind data entry** as the approval type on the **Data Entry Setup**. While creating the object, the user is prompted to declare a **Blind ID**. **Data Entry Setup** now requires a unique value.
- **Method Three:** Configure a label for Statistica Product Traceability and add it to a Data Entry Setup. Ensure that Product traceability options is selected on the Label and the Data Entry Setup. All data entered into the system now requires unique values.

Users and Groups

You can use the Statistica Enterprise Manager application to manage users and groups. There are two types of users.

- Native Statistica users are created and only exist within the Statistica application.
- Windows domain users are imported.

To create a new user, click the **New User** button.



Integrated login is possible when you import existing Windows domain users.

Permissions

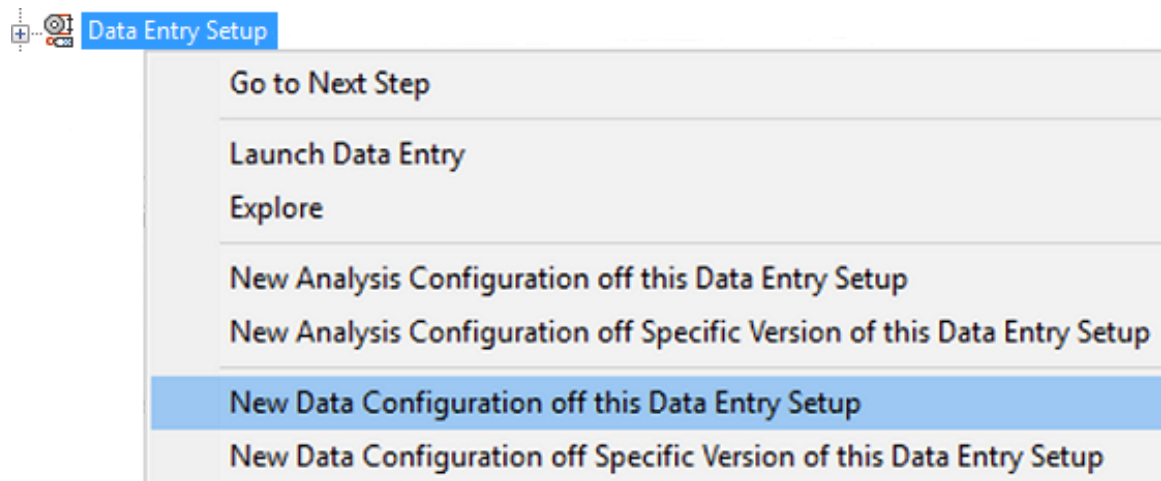
In Statistica, the following two-level group structure is widely used for permission management:

- **System level groups**, which define what applications or areas of the system their users can access. Typical names for system level groups are Data Entry Admin, Data Entry Approver, Data Entry User.
- **Object level groups**, which grant users edit and read permission to configurations. These groups typically do not contain any system permissions.

Example: Team North can more easily share configurations with the entire team.

A System Admin (SADM) has the following permissions that can be applied to users or groups:

- **Analysis Admin (AADM)** can create Analysis Configurations through the Enterprise Manager system view. Data entry administrators might need this permission to create a New Analysis Configuration off this Data Entry Setup.
- **Data Admin (DADM)** can create **Data Configurations**. Data entry administrators might need this permission to create a **New Data Configuration off this Data Entry Setup**.



- **Data Entry (DE)** can enter data.
- **Data Entry Admin (EDE)** can create **Characteristics, Labels, and Data Entry** setups, which are the permissions required to set up the data entry form.
- **Data Entry Approver (DEAPPRV)** can approve or request revisions to the entered data.
- **Historical Edit (HEDIT)** can edit complete data.
- **Override (OVR)** can enter data that is outside of the low and high range for numeric values.
- **User (USR)** can run Statistica Enterprise Manager. This base permission is needed for anyone who creates any configuration.
- The SYSTEM user in Statistica Enterprise Manager supports the blind data entry process. The system records that the SYSTEM user last modified a web form to either approve or request for revision. This user cannot be deleted or modified.

Workflow

The different levels of data entry user permissions ensure that users at different permission levels follow a workflow that protects the system against missing or incorrect data. The workflow requires that the data be complete and approved.

Example 1

Example work flow from data entry to data analysis with the **Require approval of samples** option. The work flow assumes that characteristics and labels were already created.

Procedure

1. An administrator creates a Data Entry Setup in Statistica Enterprise Manager and selects the **Require approval of samples** option.



In this workflow, you need not use a unique value in a sample label field; however, you can use a unique value in UniqueLabels. See the [System Options, IIS section](#).

2. A user with **Data Entry (DE)** permissions enters the data. The data can be saved at any point and you can come back and add or edit data in the form.
3. Later, the user with **Data Entry (DE)** permissions logs in to the website, [http://\[servername\]/dataentry](http://[servername]/dataentry) again to enter more data and select the **Complete** option. The data must be complete before it can be approved. After a sample is marked as complete, it cannot be edited by a user with **Data Entry (DE)** permissions unless it is marked as **Requires Revisions**. Only a user with **Historical Edit (HEDIT)** permission can edit a record with **Complete** status.

4. A user with **Data Entry Approver (DEAPPRV)** permissions reviews the data, and marks it as either **Approved** or **Requires Revisions**. This user must be different from the user who entered the data, except when otherwise allowed in Statistica Enterprise Manager, System Options, Data Entry.
5. Data that requires revisions must be modified and marked as complete again before it is eligible for approval.
6. Email notification can be sent to designated users whenever a sample is marked as Complete, Approved, or Requiring Revision.
7. Data entry activities can be recorded in an audit log.
8. An administrator sets up the data source for analysis by creating a **Data Configuration** from the **Data Entry Setup**. The administrator can also create an **Ad hoc Analysis Configuration** with filtering turned on.



Data Configurations and Analysis Configurations are created for Data Entry Setups for analysis. They can be configured to only include completed data and approved data.

9. Analyst permissions:
 - a) Can create a **Workspace** that uses the **Data Configuration** as a data source.
 - b) Can add nodes to merge in additional metadata or limits/specifications for a quality control chart.
 - c) Can add a node to generate the quality control chart.
10. An analyst saves the **Workspace** into Enterprise Manager as an **Analysis Configuration**.
11. A business user runs the **Analysis Configuration** to look at charts based on the current data. This user might also run the **Ad hoc Analysis Configuration** to perform other analyses on the data.

Example 2

This workflow walks you through the process for data entry when Blind Data Entry is used. The work flow assumes that Characteristics and Labels were already created.

Procedure

1. The administrator creates a Data Entry Setup in Statistica Enterprise Manager and selects the Blind Data Entry approval option. The company decided to use the Manual approval option because it wants to collect an electronic signature for approval from a human user. The system electronically signs the approval by selecting Automatic approval.
2. The administrator reviews the Inputs properties page on the Data Entry Setup and performs the following tasks:
 - a) Selects Blind ID (the sample label that contains a unique value: LOT123.).
 - b) Decides what other fields (Characteristics and Labels) must be compared by the system. Two people enter data, but they don't have to enter exactly the same data. **Example:** A comment field might need to be different for the two data entry employees.
 - c) Decides if a specific field is allowed to not match with the other entry and the data record still be approved. This might be needed in a complex manufacturing environment.
 - d) Reviews the email notification options on the Data Entry Setup and adds the email address for the data approver. This user receives an email when the data is complete, requires revision, or needs approved.
 - e) Grants permission to use the Data Entry Setup to data entry staff and data approvers.
3. A user with Data Entry (DE) permissions enters the primary data sample.
4. A second user with Data Entry (DE) permissions enters the matching data sample.
5. The system then detects if the data matches or not and performs these processes:
 - a) If matching values are detected in the Blind ID label, starts comparing the other fields. Sends an email to the Data approver (DEAPPRV permission) that the data is complete.

- b) If matching values are not detected in the Blind ID label, sends an email to the data approver (DEAPPRV permission) that the data requires revision. Sends an email to both data entry users if the data records do not match. The system does not provide any details on what did not match. Both users must review all the fields that they entered to ensure that the values are correct.
- c) After this review, the users who received the required revision notification complete the data again.



If the two users have difficulty matching their data records, they can log in to [http://\[server name\]/dataentry](http://[server name]/dataentry) and review a report on the differences. A third user with permission on the Data Entry Setup can communicate which field is different.

6. When both data records are complete, the approver logs in to [http://\[server name\]/dataentry](http://[server name]/dataentry), reviews the difference report on the data, clicks the **Approve** button, and electronically signs approval.

Audit Log

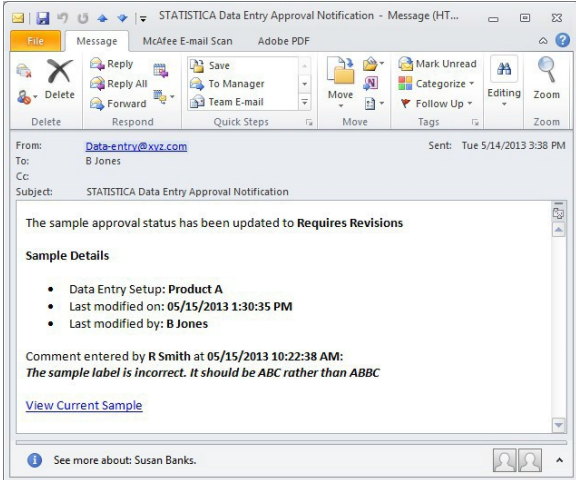
Starting with 14.0 version, the audit log is enabled by default and cannot be disabled.

This log is viewable in the Statistica Enterprise Manager application. Events are recorded for Analytic Configuration, Analysis Execution, Characteristic, Data Configuration, Data Entry Setup, Data Entry Setup Sequence, General Document, Hadoop Distributed File System connector, Label, MAS Dashboards, MAS Tasksets, System Options, and Users and Groups. Examples of events are add, approve, associate, attach, change, copy, create, delete, detach, disable, enable, log off, log on, move, override, run, send email, sync, and upload.

To modify manually entered data, the LogAllSampleChanges IIS setting must be set to true. The person viewing the sample or entering data can click the **View Sample Revision History** button to see this audit trail.

Data Entry

The Statistica Enterprise Manager application is used to configure system settings for all Data Entry Setups. Start the application and go to **System Options > Data Entry**.

Option	Description
<p>When creating a new Analysis Configuration based on Data Entry Setup, automatically add "All" to the criteria for all Labels in the Data Entry Setup</p>	<p>Select this check box to automatically add All to the criteria for all Labels in the Data Entry Setup when creating a new Analysis Configuration based on a Data Entry Setup.</p>
<p>URL for Sample Editing</p>	<p>The system uses the URL for Sample Editing box for outbound email notifications on data entry tasks. You can typically set it as <code>http://[servername]/dataentry</code>. The example email in the next image uses this URL.</p> 
<p>Retrieve all data for characteristics, independent of Data Entry setup</p>	<p>This is not a common scenario. You usually create one Characteristic and use it across many Data Entry Setups. You also analyze the Characteristic data based on one Data Entry Setup form. This option is not enabled by default. Select this check box only if you are interested in analyzing the Characteristic data across all the Data Entry Setups.</p>

Option	Description
<p>Prompt for electronic signature on sample completion</p> <p>Prompt for electronic signature on sample approval</p>	<p>Regulated customers typically select both of these options. These options prompt for an electronic signature when the following actions occur:</p> <ul style="list-style-type: none"> • User with data entry permission clicks the Complete button • Approver clicks the Approve button
<p>Allow users to approve their own samples</p>	<p>This option is typically not selected in validated environments if the Require approval of samples option on Data Entry Setups is used. Regulated industries typically do not allow the same person to enter data and approve the data. However, this option can be useful for testing new Data Entry Setups in development or non-validated environments.</p>
<p>For Blind Data Entry, user making last change can also approve</p>	<p>This option along with Allow users to approve their own samples might be enabled when using Blind Data Manual Approval on Data Entry Setups. In this case, two people enter the data. The second person also approves the data. If these two options are turned off, you need three people to do data entry and approval.</p>
<p>Default database connection for creating a Data Configuration off Data Entry Setups</p>	<p>A database connection for the Enterprise database (SEWSS) must be created and entered in this text box. You can right-click the Data Entry Setup and create a new Data Configuration and extract data for analysis.</p>
<p>Query time out</p>	<p>The default value is -1. Discuss with TIBCO Support before changing this.</p>

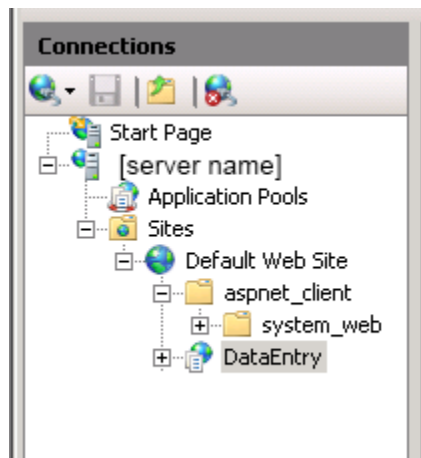


After installation, this database connection must be created and then used on this property page.


IIS, Application Settings

You can use the Internet Information Services (IIS) to set the application settings for your web server.

- On Windows Server 2008 R2, select the **Start menu > Administrative Tools > Internet Information Services (IIS) Manager**.
- On Windows Server 2012, start the **Server Manager application > Tools menu > Internet Information Services (IIS) Manager**.
- On Windows Server 2016 or 2019, search for IIS and open it.
- In the **Connections** section, open your [server name] and then **Sites**. Select and open **Default Web Site**. Select **DataEntry**.



- Double-click the **Application Settings** icon to display the list of application settings.

Application Settings	Description
Aspnet:MaxHttpCollectionKeys	<p>Defines the maximum number of form elements that can exist on an ASP.NET page. Add this IIS option if you are using forms with more than 1000 fields; otherwise, the save action fails.</p> <p> Some versions of ASP.NET default to 1000 form elements, which can cause problems when saving large data entry forms.</p>
AutoLoadQueryLabelValues	<p>Valid values are true and false. By default the value is set to true. Automatically loads the query label values if the query label has no dependencies or its dependencies have values defined.</p>
BlindDataEntryHideMatchingValue	<p>Valid values are true and false. By default the value is set to false. Set the value to true if you do not want to display the Matching Value column on the Recent Samples list. This list is displayed after you log in into <code>http://[server name]/dataentry</code>. The Matching Value column displays the unique value (sample label) such as LOT123.</p> <p>Blind data entry requires that two people enter the same data. Set this option to false to enable the second person to locate data entered by the first person on the Recent Samples list. If this option is set to true, the second data entry user has to type LOT123 into the label field.</p> <p>When the process if option is set to true:</p> <ul style="list-style-type: none"> • The second person sees a blue icon next to LOT123. • The user clicks the icon to automatically create a new form and populates the label with LOT123.
BlindDataEntryMakePrimaryOnSave	<p>Do not change without discussing with TIBCO Support. It must be false for most customers.</p>

Application Settings	Description
BlindDataEntryPrepopulateMatchingSample	Specific to when Blind Data Entry is enabled for a Data Entry Setup . Possible values are true and false. By default the value is set to false. If the value is set to true, when a matching sample is created, the values from the primary sample are automatically prefilled for inputs that are not part of the Blind Data Entry comparison.
BlindDataEntryShowUnmatchedValues	Specific to when Blind Data Entry is enabled for a Data Entry Setup . Possible values are true and false. If the value is set to true, when differences occur when the primary or matching sample are saved, the different values from the other sample are displayed to the user. When set to false, only the input name and piece numbers of the differences are identified to the user, and the actual different value from the other sample is not visible to the user.
BlindDataEntrySyncFields	Specific to when Blind Data Entry is enabled for a Data Entry Setup and there is a field that does not match between two samples. In other words the Use this field matching the two Blind Data Entry samples check box is not selected.
ByColumnsFirstColumnWidth	When a data entry form is configured to display the inputs by columns, use this setting to set the width of the first column displayed.
ByColumnsWidth	Use to set the column width for fields on the Data Entry pages.
ByRowsFirstColumnWidth	When a data entry form is configured to display the inputs by rows, use this setting to set the width of the first column displayed.
ByRowsWidth	Use to set the width of the rows for the Data Entry pages.
CommentNotRequired	The default value is false. If this is set to true, then modifications (save, delete, approve) do not require text in the Comments field. The Comments field is part of every form and is not part of the data. Therefore if a customer wants a comment with the data entered in the form, they must create a Sample Label to contain this information and set this to true.
CommentNotRequiredOnApprove	When Sample approval is enabled and the sample is being reviewed by the approver, if this option is set to true, the approver is required to enter a comment only when the sample is marked as Requires Revision. If the sample is marked as Approved, a comment is not required.
CompareSampleCaseSensitive	If this option is set to true, when comparing sample label data, the system uses case sensitive compare (so a is different than A). If false, then case insensitive compare is applied (a and A are considered the same).

Application Settings	Description
DateFormat	This option controls the format of the date/times that are retrieved from the database. Example: Dates can be entered as 10/1/2010 but displayed as ddMMyy.
DateFormatLocale	If this option is defined, it forces clients to use a specific locale just for Date/Time controls. The expected syntax of the option is a CultureInfo name such as en-US or es-ES . Note that this value is blank by default and not a commonly used setting.
DefaultDomainName	This option sets the domain name most frequently used for integrated login.
DisableDatePicker	If set to false, the date labels on the data entry form can be entered using a date picker control. If set to true, the dates must be entered as strings.
DisableCharacteristicDescription	Specifies whether the Characteristic description defined in Enterprise Manager is displayed as part of the Data Entry Form visible in the header for that field. If this option is set to false, the description is still available as a header tooltip.
DisableLabelDescription	Specifies whether the Label description defined in Enterprise Manager is displayed as part of the Data Entry Form visible in the header for that field. If this option is set to false, the description is still available as a header tooltip.
EditMaskChar	This option sets the value displayed by Masked edit when nothing has been entered for a character.
EditMaskInteger	Integer format string used when UseEditMaskToEnforcePrecision is defined as true. The default value is 9999999999, which allows the user to enter up to 10 numbers for an integer value.
EmailFromAddress	Set the From email address used when sending validation status.
FixedHeaders	The default value is true. If set to false, the left column headers are not displayed in a fixed position where they are always visible.
GlobalRecentSamplesMaxNumber	This setting limits samples.
GlobalRecentSamplesNumberOfDays	This setting applies to the global listing of samples across all Data Entry Setups . Leaving it blank causes the number of samples to be unlimited and can cause performance issues.

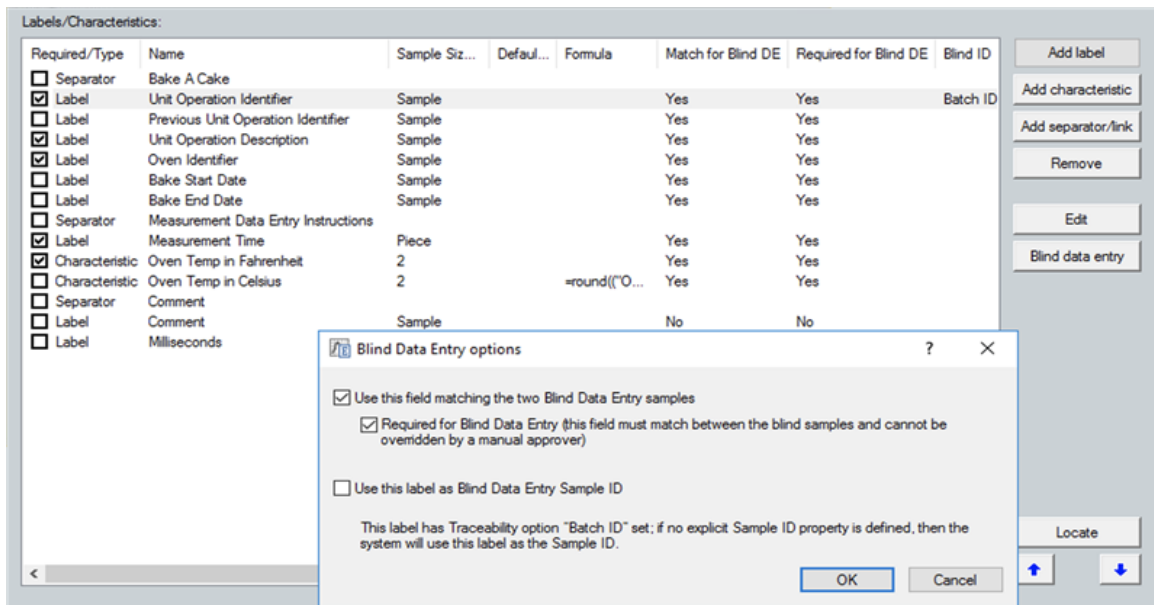
Application Settings	Description
GlobalRecentSamplesNumberOfDays	After signing into Statistica Data Entry , the first page displays the recent samples. This variable controls the number of days of data that is retrieved, regardless of the Data Entry Setup . Leaving it blank causes the samples to be unfiltered, and can cause a performance issue.
LingerTimeout	When Serialized session state is used, which would be required in a multiple Web Data Entry Server (NLB) environment, this setting defines the time in seconds to linger the WBDE feature checkout. The default value is 75, which means if you did not explicitly log out of the Web Data Entry Server and instead closed your browser window, it can take up to 75 seconds for the WBDE feature being consumed to be released. The smaller the value, the more often the client needs to communicate with the Web Data Entry Server to keep the license from being released. The setting cannot be less than 30 or greater than 900.
LogAllSampleChanges	The default value is false. If set to true, every time a sample is saved, any changes from the previous version of the sample are added to the audit log. When set to false, the changed values are only added to the Audit log when a Completed sample is resaved.
LoginMessage	This HTML message is displayed prior to logging in to Data Entry. Copy your HTML code into the variable. Ensure that the HTML is all on one line. New lines are not acceptable.
LoadSystemViewFoldersOnDemand	The default value is false. This option is used with TreeRecursionLevel to tune performance. If this option is set to true, then all the folders are loaded into memory when the user signs in to the application. This can slow down the login process if there are hundreds of folders which have hundreds of child folders. If there are only a few folders, then the login process does not have any performance issues.
LogUserActivity	<p>The default value is false. If set to true, event log entries are entered into the Statistica application event log for the following events:</p> <ul style="list-style-type: none"> • User login • Sample approval Sample saving • User logout – (This event is triggered only when the serialized session state is not enabled)
MainMenuMessage	Leave this field blank. It is no longer supported.
MasterPageLogo	This option displays the file name of the image that is displayed in the upper-right corner.

Application Settings	Description
MaxParentSamples	Specific to Data Entry Setups that are included in a Data Entry Sequence . Default is 1 level of samples. This is the maximum level of parent samples used when evaluating constraints and calculated formulas. Formulas can use variables (fields) from other forms to calculate values. Change this to 0 and all parents within a sequence are used. This can slow down the computation speed. For example, a sequence session has 2 parents (data entered into 2 top-level forms) and 20 children samples (data entered into 20 forms) and the last sample loads all 22 forms into memory every time a calculated formula is evaluated.
PromptForSampleSave	The default value is false. If set to true, when you click the Save button, you are prompted for an electronic signature. By default, you are only prompted for an electronic signature when you click the Save and Complete button.
QueryLabelMaxEntries	The default value is 1000. This setting restricts the maximum entries populated in the Query label combo box.
QueryTimeout	Timeout value for query operations. By default the value is “_” (blank), which means the database default setting is used.
RecentSamplesLabels	After signing into Statistica Data Entry, the first page displays the recent samples. You can modify what labels are displayed for the recent samples. The label names are pipe delimited. Example: Batch Number ID Product Name
RecentSamplesMaxNumber	If left blank, there is no restriction on the maximum number of samples. However, doing this can slow down the performance.
RecentSamplesNumberofDays	This variable controls the number of days of data that is retrieved after selecting a specific Data Entry Setup . If left blank, there is no control on the number of retrieved samples. This can slow down the performance.
RecentSamplesPageSize	After signing into Statistica Data Entry, the first page displays the recent samples. This variable controls how many rows are displayed before paging is enabled.
RequireApprovalOnDelete	Default value is false. Set this to true and a second user with HEDIT permission must login to approve the deletion of the sample.
SampleUpdateTimeout	The default value is 45. This variable defines the timeout value in seconds for sample save operations. Sample save operations are serialized, so on very busy Web Data Entry servers this value might need to be increased.
SendEmailOnSampleApproval	Set this to true if email notifications must be sent when the approver clicks the Approve button.

Application Settings	Description
SendEmailOnSampleCompletion	Set this option to true if email notifications must be sent when the Complete button is clicked by the data entry user.
SortSystemView	When selecting a web form, Data Entry Setup to use in a browser, the folder structure and Data Entry Setups are in alphabetical order. Set this option to false to see objects sorted by their modification date.
TreeRecursionLevel	The default value is 1 and only changes performance if LoadSystemViewFoldersOnDemand is set to true. The recursion level tells the system how many levels to load when the user expands folders in the user interface.
UniqueLabels	<p>These labels must be unique across samples in a Data Entry Setup. You can have multiple unique labels on a Data Entry Setup. The label names are pipe delimited.</p> <p>EXAMPLE: Batch Number Batch ID ID is mainly used when the Require approval of samples option is turned on in Data Entry Setups. See section Label, Unique Values.</p>
UseDatabaseLock	By default the value is false. Set to true to enable database synchronization across servers/processes with Web Data Entry.
UseDateTimeLabelDisplayFormat	By default the value is true and the date/time labels use the DateFormat configuration option. Set to false to use the display format configured in Statistica Enterprise Manager.
UseEditMaskForDate	The default value is true. This variable determines whether an edit mask is displayed for date/time labels. If enabled, the mask value is defined by the DateFormat setting. If this value is set to false, dates can still be validated based on the DateFormat setting, but a mask control is not displayed to control input.
UserEditMaskToEnforcePrecision	<p>The two types of precision enforcement:</p> <ul style="list-style-type: none"> • The default (false) option displays ToolTips about the precision, and only enforces it after data entry is completed on the Characteristic. This option offers flexibility. • If you only choose to allow users to type the precise amount of numbers, set this option to true.
UseMTAObjects	The default value is false. Do not change without discussing with support. It must be false for most customers.
WebSTATHost	Name of server where Statistica Server is installed.

Blind Data Entry Options

The most common use case for this option is a Sample Label that is named Notes or Comments. This field is used to hold comments to communicate between the two people entering the data. Possible values are true and false. By default the value is set to false.



If the value is set to true, then the two people doing manual data entry share this field. The following is an example workflow:

1. **Data Entry Person 1:** Enters data on form. This is the Primary Sample. They type "XYZ" in the **Sample Label** field. They save the form but don't mark it complete. This value is not compared (matched) between the two samples. This field can be used to communicate with the second person who is doing data entry.
2. **Data Entry Person 2:** Enters the Matching Sample. They see "XYZ" in the **Sample Label** field. They can now append additional text to this comment or replace all the text with "ABC". They save the form and mark it complete.
3. **Data Entry Person 1:** Views the Primary Sample. They see "ABC" in the **Sample Label** field. They append text so the **Sample Label** field now contains "ABC XYZ". They save the form and mark it complete.
4. **Data Entry Person 2:** Views the Matching Sample and sees "ABC XYZ".

LoginMessage

It is a good practice to edit and view your HTML in another tool before copying it into these variables. Both of these variables are installed with sample text.

The **LoginMessage** is seen only before you log in to the website on [http://\[server name\]/dataentry](http://[server name]/dataentry).

The **MainMenuMessage** is displayed after logging into the system. See the following example:

LoginMessage example HTML:

```
<p><u>This is example text that should be replaced.</u>This message uses HTML
format. </p><p>An administrator will need to modify
this text. It is configured via IIS. Select the <em>Start </em>menu,
<em>Administrative Tools</em>, <em>Internet Information Services (IIS)
Manager</em>. In the <em>Connections</em> section, open your <em>[server name] </
em>and then <em>Sites</em>. Select and open <em>Default
Web Site</em>. Now you can select <em>Data Entry</em>. Edit the ASP.NET Application
```

Setting `LoginMessage`.

Make sure the HTML is all on one line. New lines are not acceptable in the HTML.

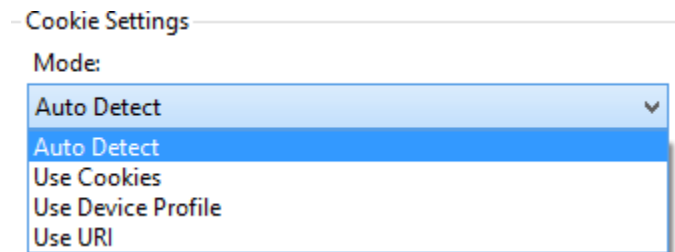
Users open a browser and log into Statistica Data Entry Server to manually enter data into web forms. The web forms are created, configured, versioned, approved, modified with the Statistica Enterprise Manager application. This application is the administrator's user interface for the metadata store (database). In other words, the user entering manual data in a web form and the user creating the web form are connected to the same metadata store.

IIS, Session State

By default, cookie-based sessions are enabled. This option prevents use of multiple browser tabs (sessions) within one browser window.

To turn off cookies:

1. Start IIS.
2. Double-click the **Session State** icon.
3. Select **Use URI** from **Cookie Settings**.



Comment Box

Data entered in the **Sample Comments** box can be viewed by accessing [http://\[server name\]/dataentry](http://[server name]/dataentry). This box communicates important information about data entry or approval. These comments are not retrieved with other form data by a **Data Configuration** or **Analysis Configuration**.

If you need to include comments with the data that is analyzed, create a Label to contain this information.

Sample Comments

To increase the size of the comment box, edit the following file on the server:

- File path: `C:\WebSTATISTICAPub\DataEntry\StyleSheet1.css`
- Modify the height and width fields in the **CommentsEditor** section.

```

.LoginTextBoxClass
{
    font-size:1em;
    width: 100px;
    height: 20px;
}

.CommentsEditor
{
    position: relative;
    height: 50px;
    width: 500px;
    display: block;
}

.ButtonClassAdd
{
    position: relative;
}

.ButtonClassRemove
{
    position: relative;
}

```

Electronic Signature on Save

You can configure the software to prompt for an electronic signature whenever the **Save** or **Save and Complete** buttons are clicked by two methods:

- Modify a configuration file on the server.

Add this option to the file

\WebSTATISTICAPub\DataEntry\web.config:

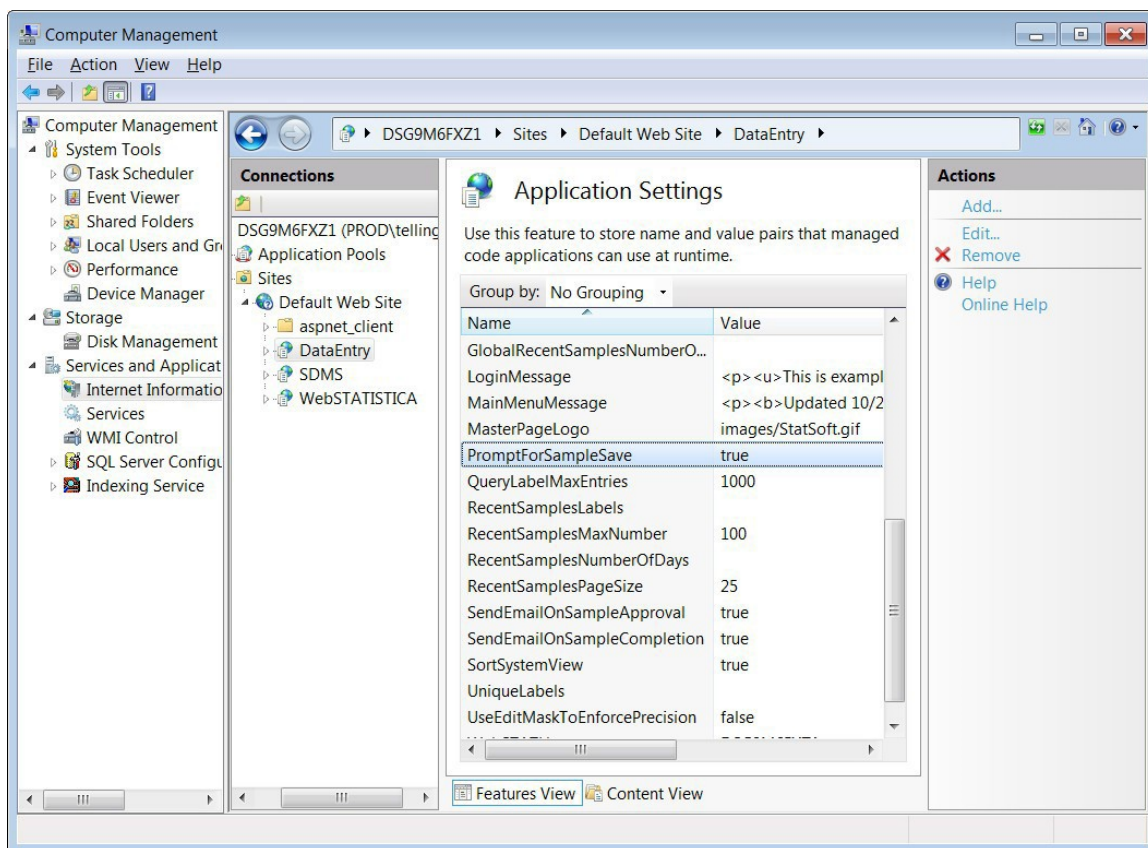
```

<!-- If true then when the Save button is clicked prompt for an electronic
signature -->
<add key="PromptForSampleSave" value="false"/>

```

- Adjust an **IIS ASP.NET** setting.

The **IIS ASP.Net** setting is called **PromptForSampleSave** as shown:



Web DE Scalability

Overview

By default **Web Data Entry** is configured to run inside a single **ASP.NET** worker process.

You now have options that allow the **Web Data Entry Server** to handle an increased number of users.

- Create a **Web Garden** by configuring the application to use multiple **ASP.NET** worker processes on a single server.
- Configure a **Web Farm** with multiple web servers configured to accept requests on a single virtual IP address, while still maintaining the **Web Garden** configuration on each server.
- Optionally, integrate **Web Data Entry** into a **Network load balanced (NLB)** environment where multiple **Web Data Entry Servers** are available to service requests.

Both configurations require the **Session State** configuration. The **Web Farm** configuration requires the **Machine Key** configuration. The steps for both of these procedures plus integrating a network load balanced environment are outlined in the following way.

Session State

Whenever you configure **Web Data Entry** for use in a **Web Garden** or **Web Farm**, you must configure an alternate session state mode. It can be one of the following:

- An **ASP.NET State Server** running on one of the computers in the cluster
- A **SQL Server based Session State**

The **Session State** setting is configured in the `web.config` settings located in the `WebSTATISTICAPub\dataentry` folder on each **Web Data Entry Server**. You can find an existing `<sessionState/>` node in the `<System.Web/>` section of the `web.config`. The following XML is an example of using an **ASP.NET State Service** that has been started in the first node in the **NLB** cluster.

```
<sessionState mode="StateServer"
stateConnectionString="tcpip=WebDE1.tulsa.statsoft.com:42424"
cookieless="AutoDetect" timeout="5" />
```

CAUTION: Keep in mind that using an **ASP.NET State Server** is a single point of failure. If that service is not available, then active Web Data Entry sessions are lost and new sessions are not possible until that service is restored or Web Data Entry is configured to use a different **ASP.NET State Server**.

MORE INFORMATION: Additional information on configuring an **ASP.NET State Server** or using **SQL Server** to store session state is available here:

<https://msdn.microsoft.com/en-us/library/ms178586.aspx>.

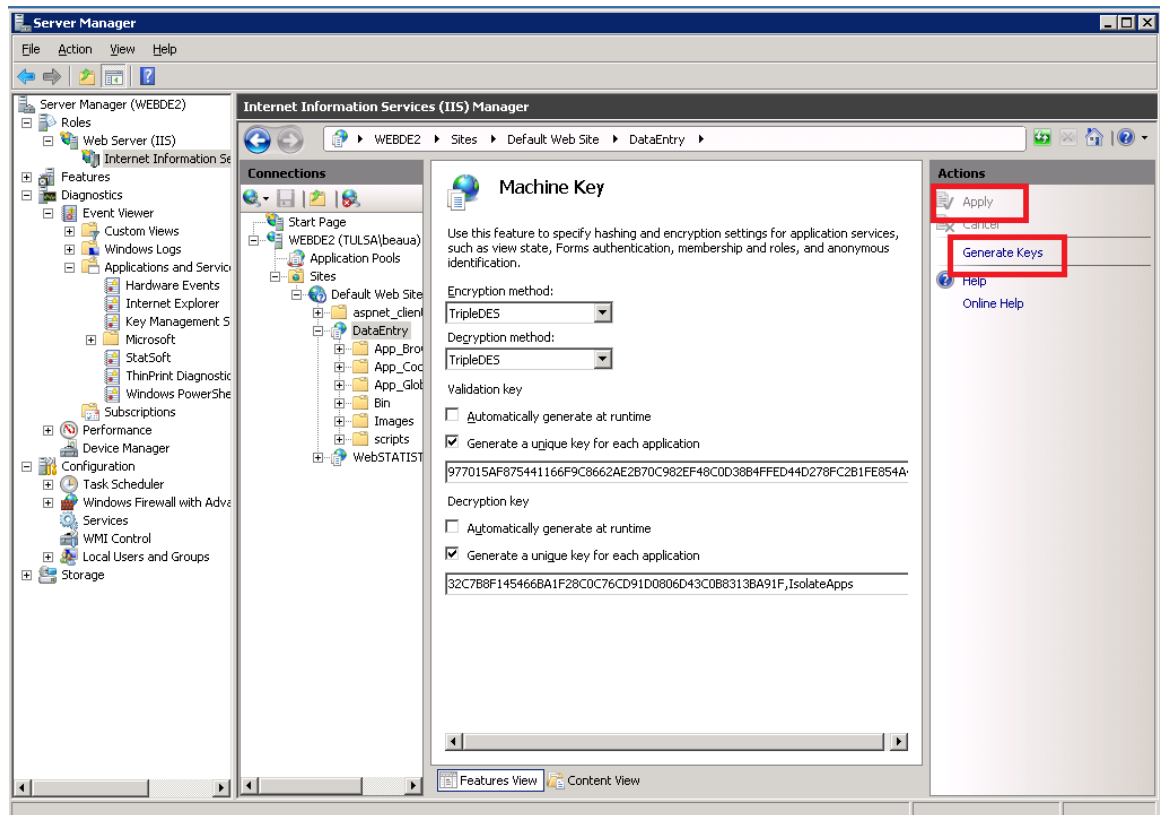
Configuring Machine Key

A static Machine Key setting must be configured if multiple servers, as in a Web Farm, are configured for Web Data Entry.

This setting is not necessary if only a Web Garden has been configured and Web Data Entry does not scale out to multiple servers.

Procedure

1. On one of the servers to be used in the cluster, open the IIS Manager dialog box.
2. Select the **DataEntry** application, then the **Machine Key** option in the **ASP.NET** section for that application.
3. Click **Generate Keys** and then **Apply**, which updates the `web.config` in the **DataEntry** folder with the unique keys.



- Update the existing <MachineKey> section in the <System.Web> portion of the web.config on the other servers in the **NLB cluster**, with the same text.

```
<machineKey decryption="3DES"
decryptionKey="32C7B8F145466BA1F28C0C76CD91D0806D43C0B8313BA91F, IsolateApps"
validation="3DES"
validationKey="977015AF875441166F9C8662AE2B70C982EF48C0D38B4FFED44D278FC2B1FE854A
44BC
E52F53F8304831DB65477F261A03C2123FA61CE6B5C05A763088CF5A56, IsolateApps" />
```

Configuring Web Data Entry

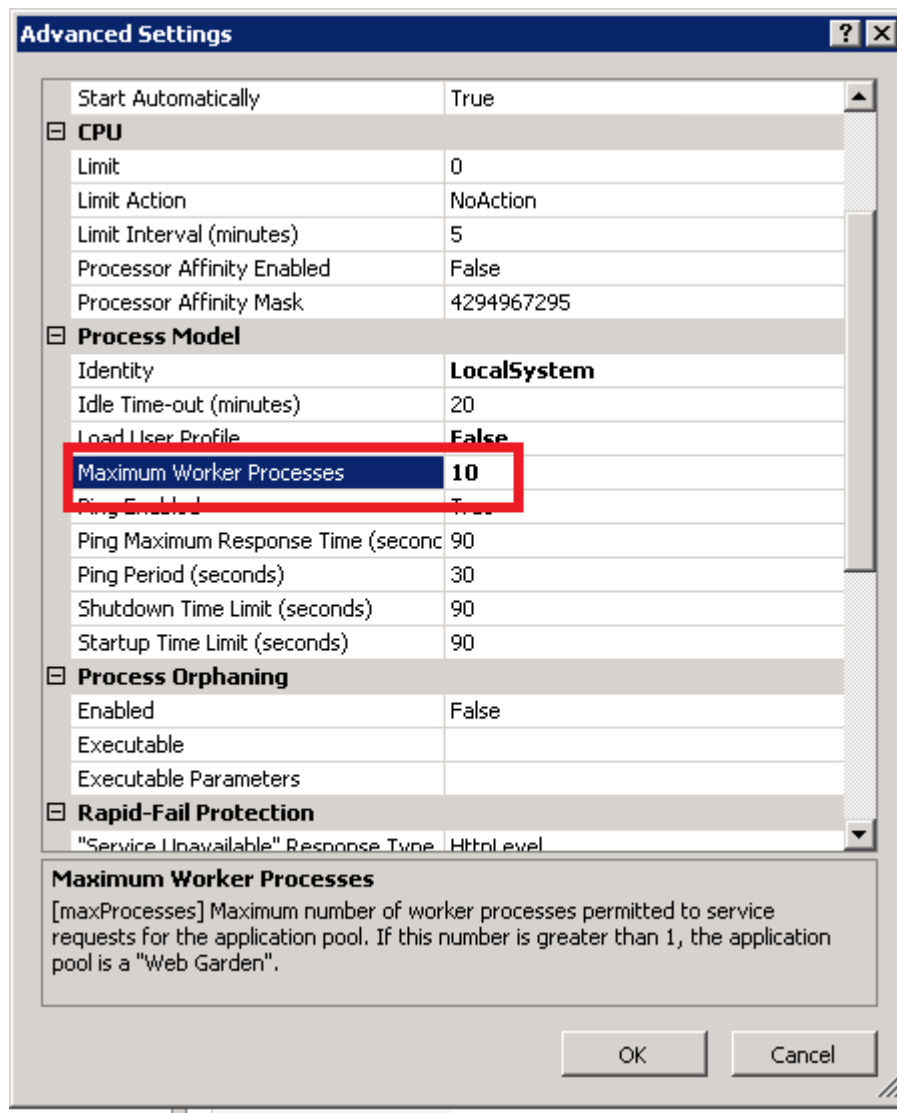
You can configure Web Data Entry to use multiple processes, as in **Web Garden**, in IIS.

Procedure

- Select the **DataEntry** application pool in **IIS Manager**. This opens the Advanced Settings dialog box.
- The **Maximum Worker Processes** default value is 1. You can increase it to allow multiple w3wp.exe worker processes to service requests.



As mentioned previously, an Out of process session state mode must be configured to use a Session State Server or a SQL Server based session state.



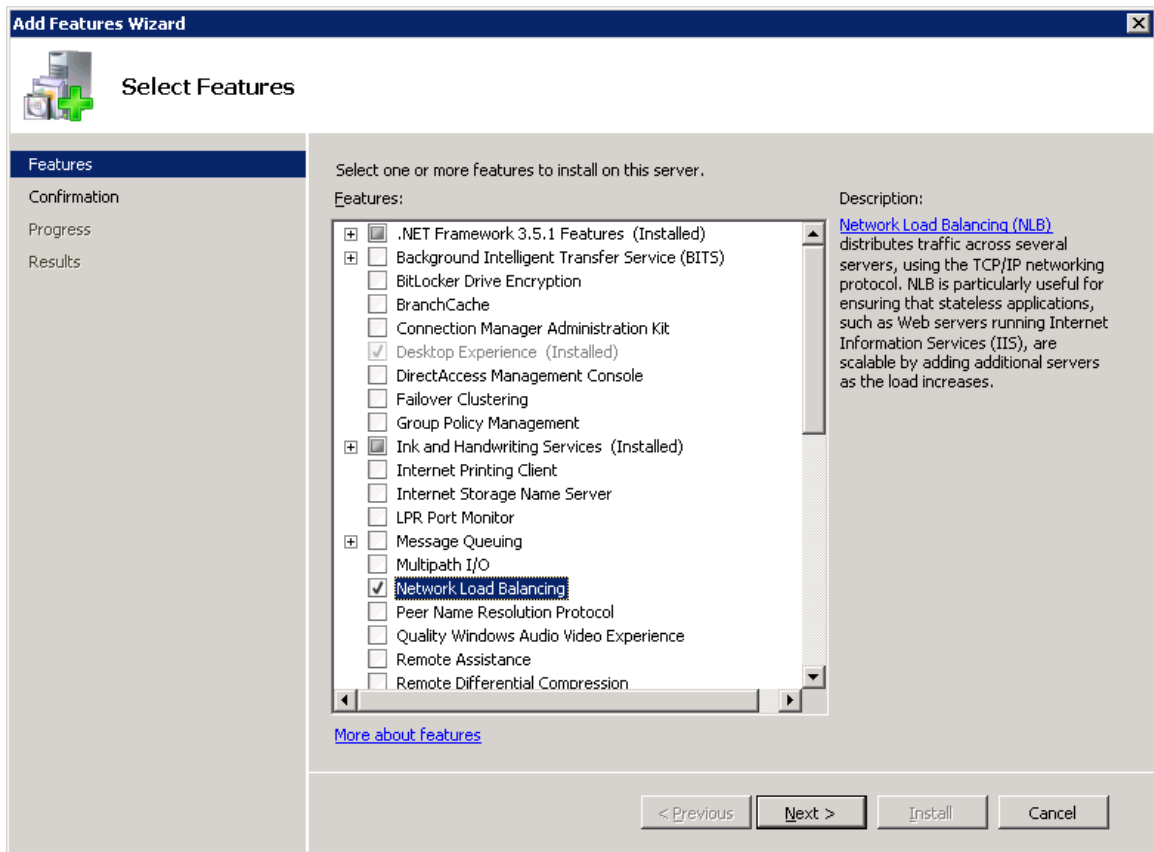
Microsoft Network Load Balancing

The following section contains instructions on how to configure **Microsoft Network Load Balancing** for use with Web Data Entry to create a **Web Farm**. If you have an existing NLB technology in place, it can be used instead of Microsoft NLB. In general, the load balancer must be configured to use round robin scheduling, and TCP port 80 traffic needs to be load balanced.

Installing Network Load Balancing

See Microsoft documentation: <http://technet.microsoft.com/en-us/library/cc731695.aspx>

Add **Network Load Balancing** as a feature to all servers that participate in the load balancing cluster.



Creating a new network load balancing cluster

See <http://technet.microsoft.com/en-us/library/cc771008.aspx>

All servers to participate in the cluster need a network adapter with a static IP address. An additional static IP is needed for the Cluster IP.

Example

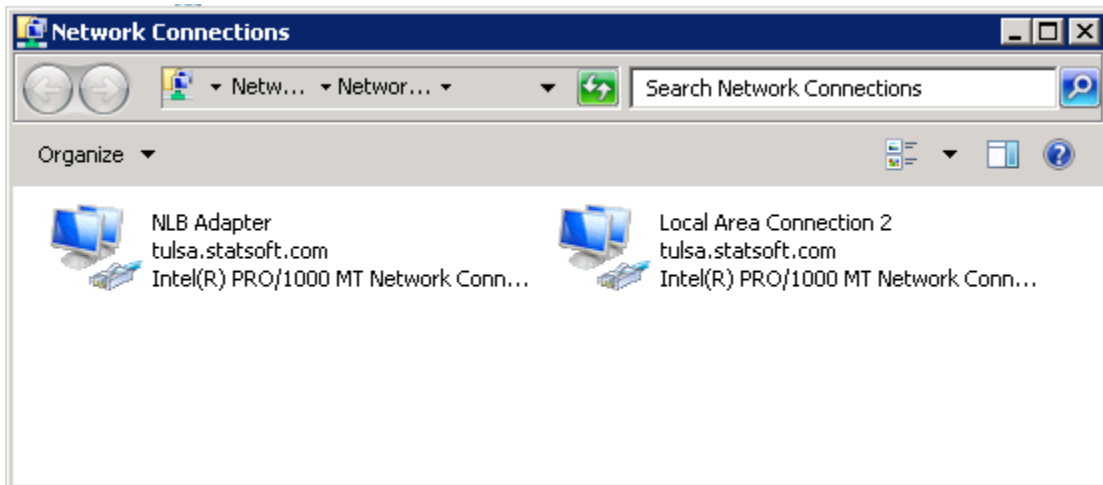
In this example, two servers with Web Data Entry installed use the following host names and IP addresses:

- WebDE1 – 192.168.0.115
- WebDE2 – 192.168.0.116

The Cluster IP used is 192.168.0.117.

A DNS entry can be created (decluster.domain.com) that points to that IP address, although it is not required. Alternatively, the Web Data Entry server can be accessed using the cluster IP directly.

It is a good practice to have two network adapters on the NLB computers participating in the cluster.

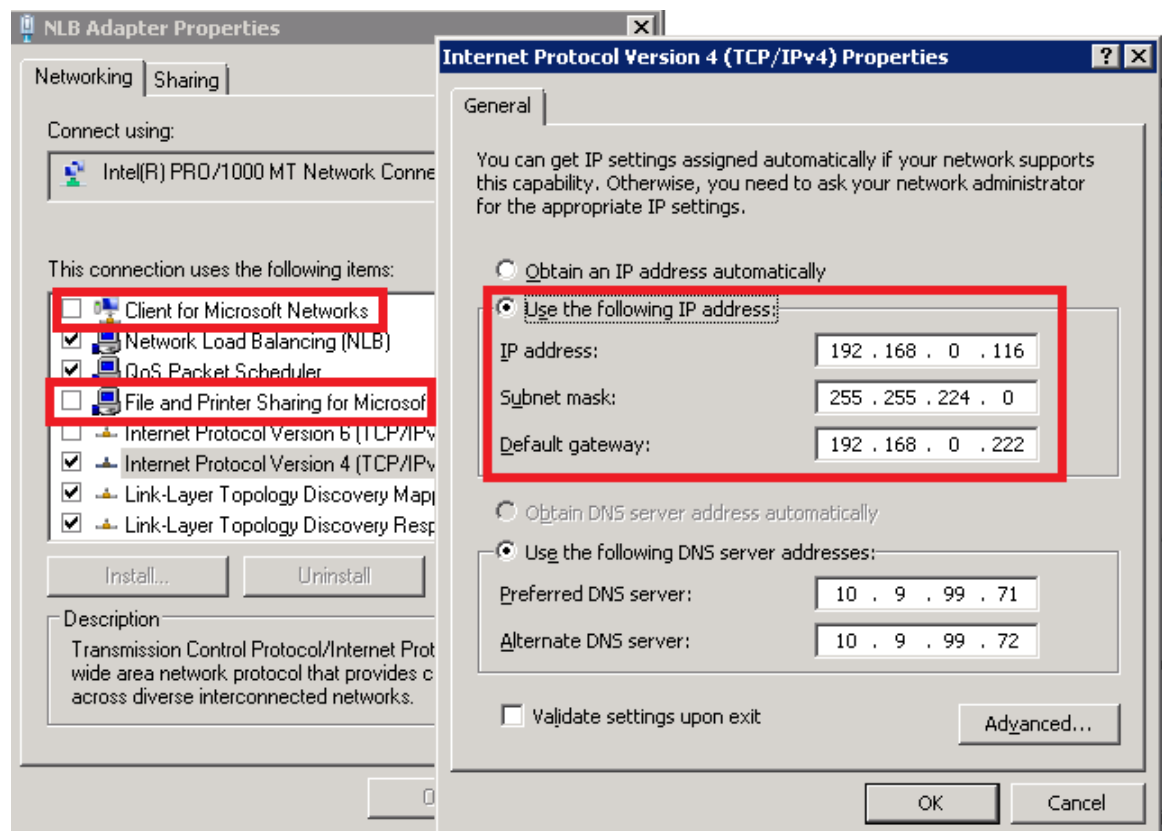


Procedure

1. Define a static IP address for the network adapter. It is used to service NLB requests.



You must disable **Client for Microsoft Networks** and **File and Printer Sharing for Microsoft Networks**.



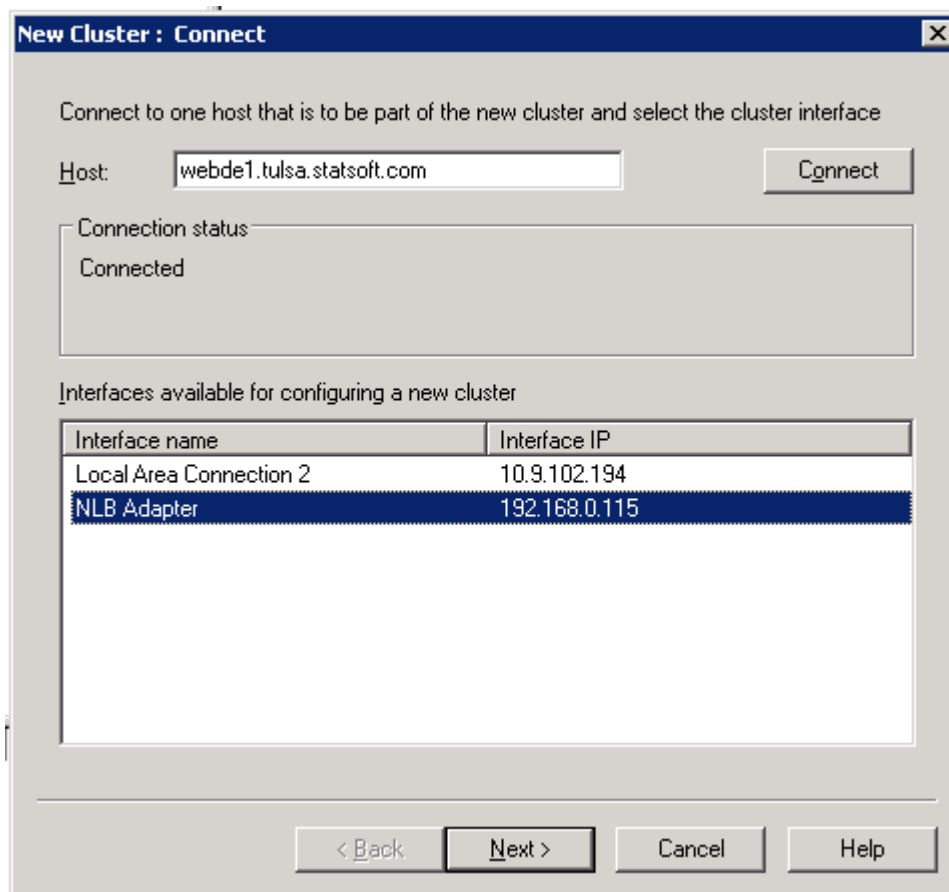
2. Open the Network Load Balancing Manager located in Administrator Tools.



3. Right-click **Network Load Balancing Cluster** and click **New Cluster**.



4. Enter a host name or IP address of one of the servers in the **Load balancing cluster**. In this example the IPs on the NIC used by the first server was 192.168.0.115.
5. After you have connected to the server, select the **Network adapter** that participates in the cluster. In this example the VM only has one network adapter.



6. In the next dialog box, keep the default settings.

New Cluster : Host Parameters

Priority (unique host identifier): 1

Dedicated IP addresses

IP address	Subnet mask
192.168.0.115	255.255.224.0

Add... Edit... Remove

Initial host state

Default state: Started

Retain suspended state after computer restarts

< Back Next > Cancel Help

7. Add the **Cluster IP address** (192.168.0.117 in this example). Manually configure the **Full Internet name** on your DNS servers for it to resolve to the cluster IP address.

New Cluster : Cluster IP Addresses

The cluster IP addresses are shared by every member of the cluster for load balancing. The first IP address listed is considered the primary cluster IP address and used for cluster heartbeats.

Cluster IP addresses:

IP add

Add IP Address

Add IPv4 address:

IPv4 address: 192 . 168 . 0 . 117

Subnet mask: 255 . 255 . 224 . 0

Add IPv6 address:

IPv6 address:

Generate IPv6 addresses:

Link-local Site-local Global

OK Cancel

< Back Next > Cancel Help

8. Configure the **Cluster parameters**.

New Cluster : Cluster Parameters

Cluster IP configuration

IP address: 192.168.0.117

Subnet mask: 255 . 255 . 224 . 0

Full Internet name: livescore.tulsa.statsoft.c

Network address: 02-bf-c0-a8-00-75

Cluster operation mode

Unicast

Multicast

IGMP multicast

< Back Next > Cancel Help

9. The default option in **Cluster Operation Mode** is **Unicast**. This changes the network adapter MAC address so it is the same for all hosts in the cluster.
- One network adapter is available on the server.
 - Two network adapters on each server.

Network Adapters on the Server

One network adapter is available on the server

The hosts participating in the cluster are not able to communicate with each other. In a Web Data Entry cluster, the hosts must not be required to communicate with each other unless one of the hosts is also a Session State Server, Statistica License Server. However, using **Unicast** mode with only one network adapter means you might need to manage the NLB cluster using a server that is not part of the cluster.

If only a single adapter is available on the NLB nodes, select **Multicast** and **IGMP Multicast**. This choice adds a layer two multicast address to the network adapter instead of changing the primary MAC address. The hosts within the cluster are able to communicate with each other even if only one network adapter is present.

To prevent port flooding, if your switch hardware supports **IGMP** snooping, select the **IGMP multicast** option. Otherwise, you can use standard **Multicast** with manual configuration of the switch hardware for the cluster IP so that only those ports receive the multicast traffic.

Two network adapters on each server

Leave option set to **Unicast**. As stated before, it is preferable to set up the NLB cluster with 2 network adapters on each server that is a member of the cluster.

- One adapter is dedicated to the NLB cluster and can have **Client for Microsoft Networks** disabled. This adapter has the static cluster IPs assigned to it.
- The other adapter is used for general network communication and standard (non- NLB) communication between the NLB nodes.

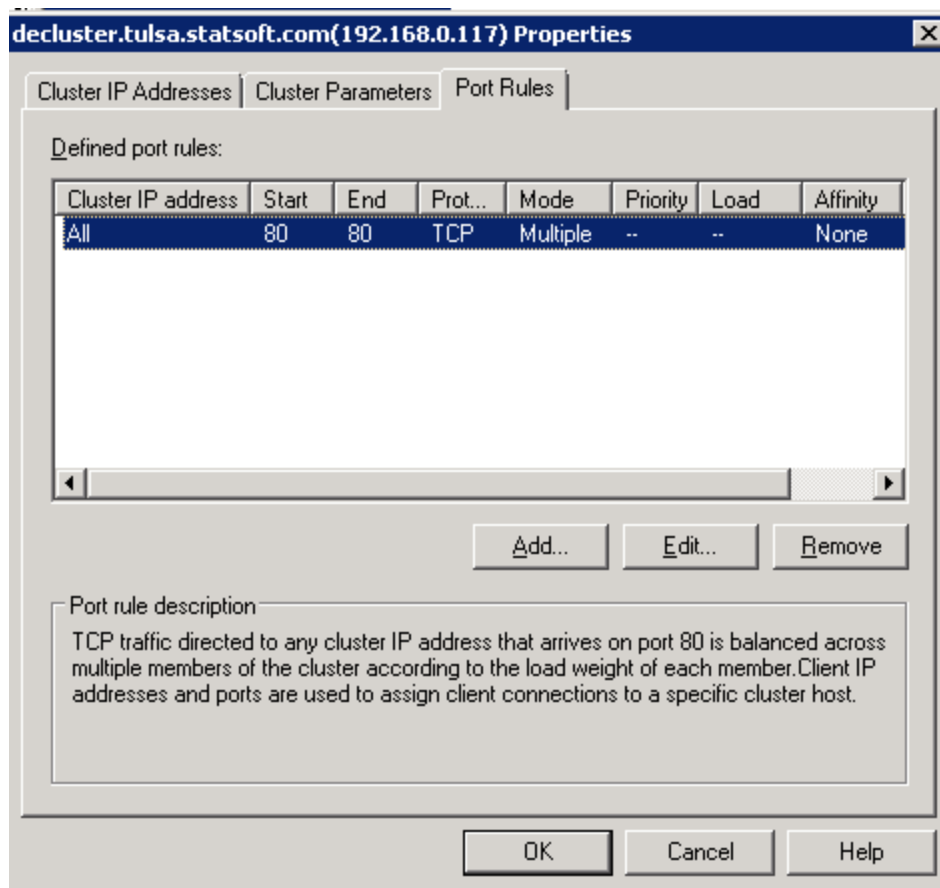
More information is available on the following pages:

- <http://technet.microsoft.com/en-us/library/bb742455.aspx>
 - <http://www.isaserver.org/articles/basicnlbpart2.html>
 - [http://technet.microsoft.com/en-us/library/cc782694\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc782694(WS.10).aspx)
 - http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=1006580
1. By default the port rules load balance all TCP and UDP traffic to the computers participating in the cluster. Web Data Entry is only concerned with TCP traffic on the IIS web site port (usually 80), so edit the port rule as shown in the following image:

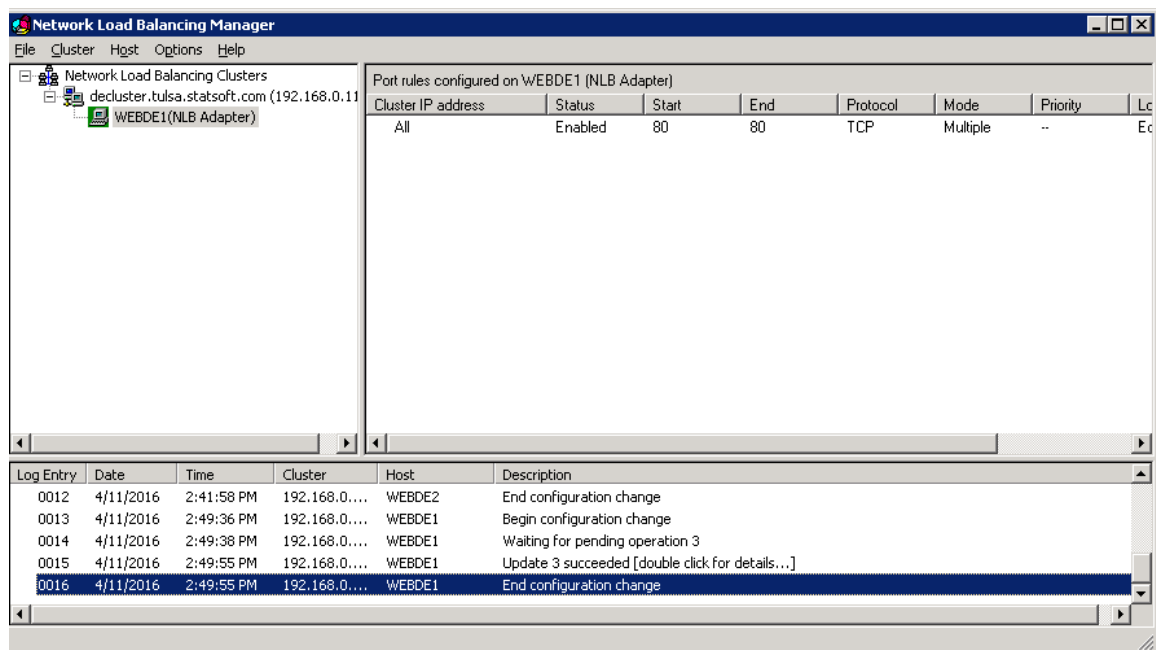


You must set the Affinity option to None.

2. Click the **Finish** button on the **Port Rules** dialog box to create the new cluster.

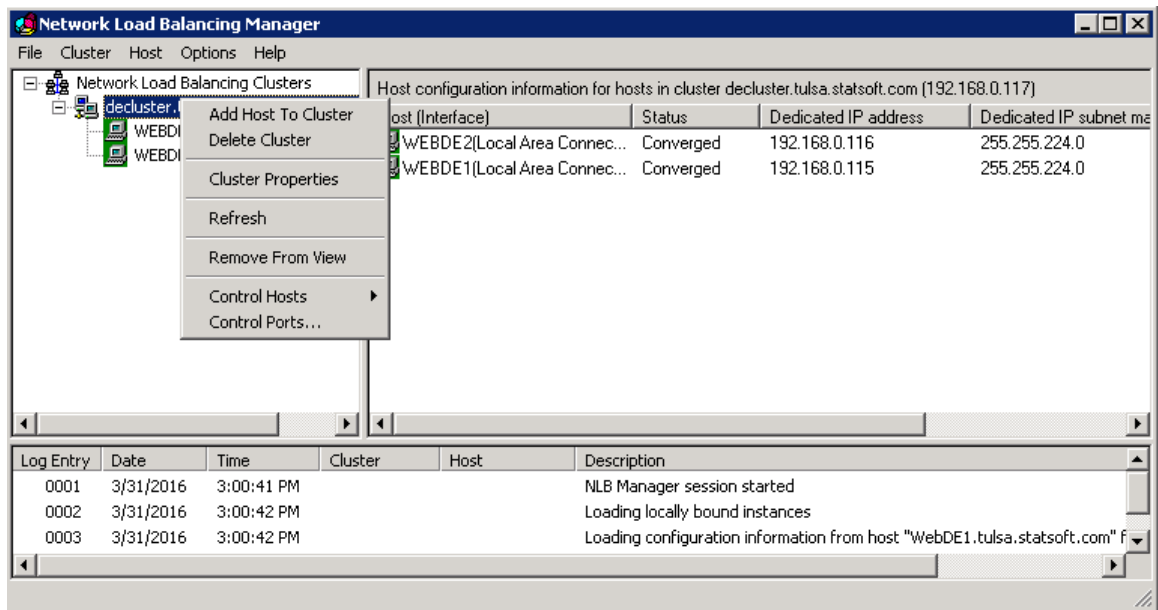


After a short delay you must see the first host listed as a child of the new cluster.

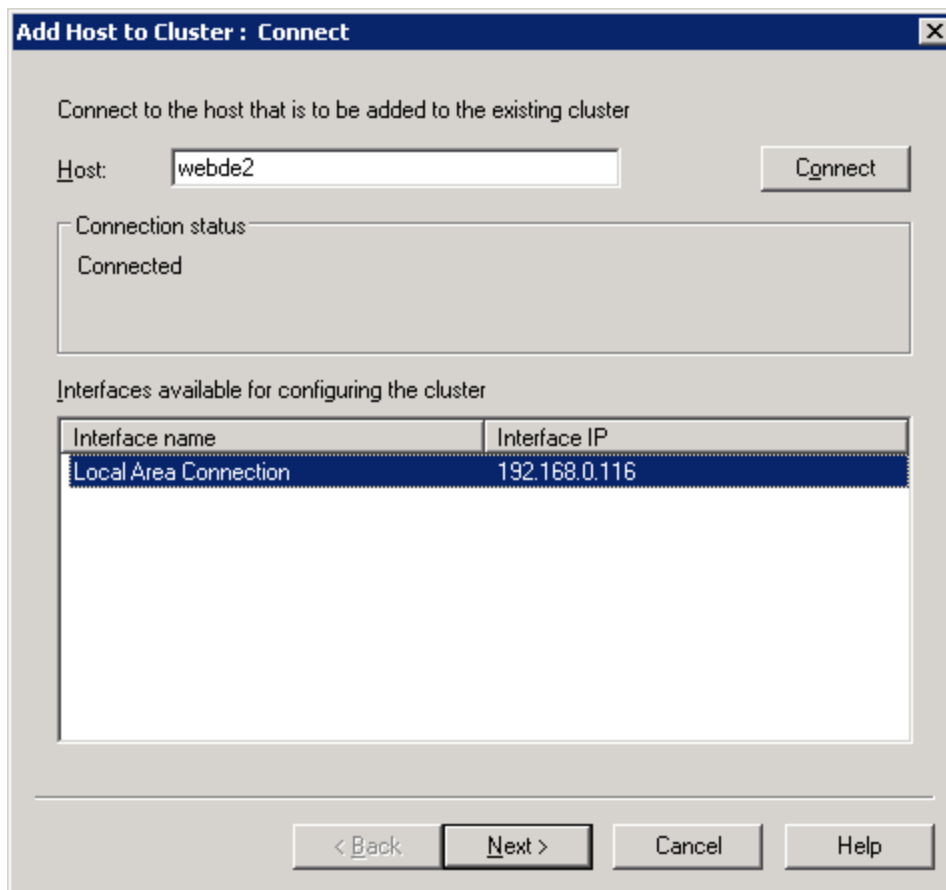


Adding additional hosts to the cluster

1. Select the **decluster.cluster** and select **Add Host to Cluster**.



2. Type the name of IP of the host you want to add to the cluster and click **Connect**.
3. In the Connect dialog box, select the appropriate network adapter for the cluster.



4. Leave the defaults in the Host Parameter dialog box.

Add Host to Cluster : Host Parameters

Priority (unique host identifier):

Dedicated IP addresses

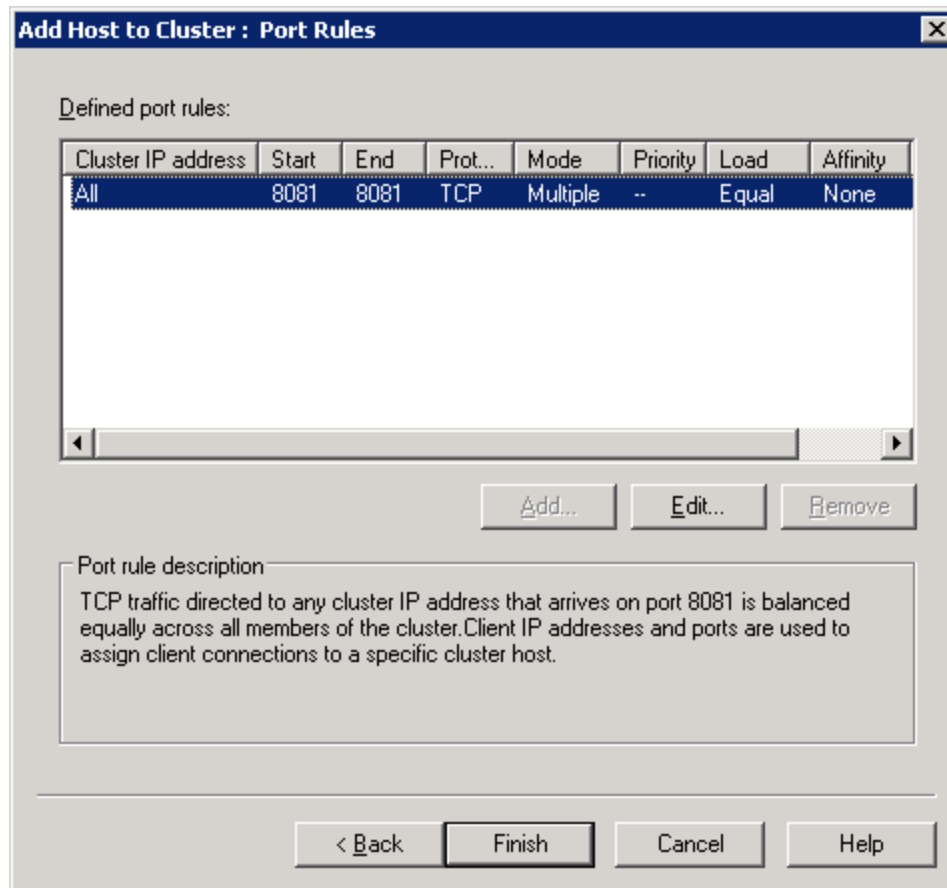
IP address	Subnet mask
192.168.0.116	255.255.224.0

Initial host state

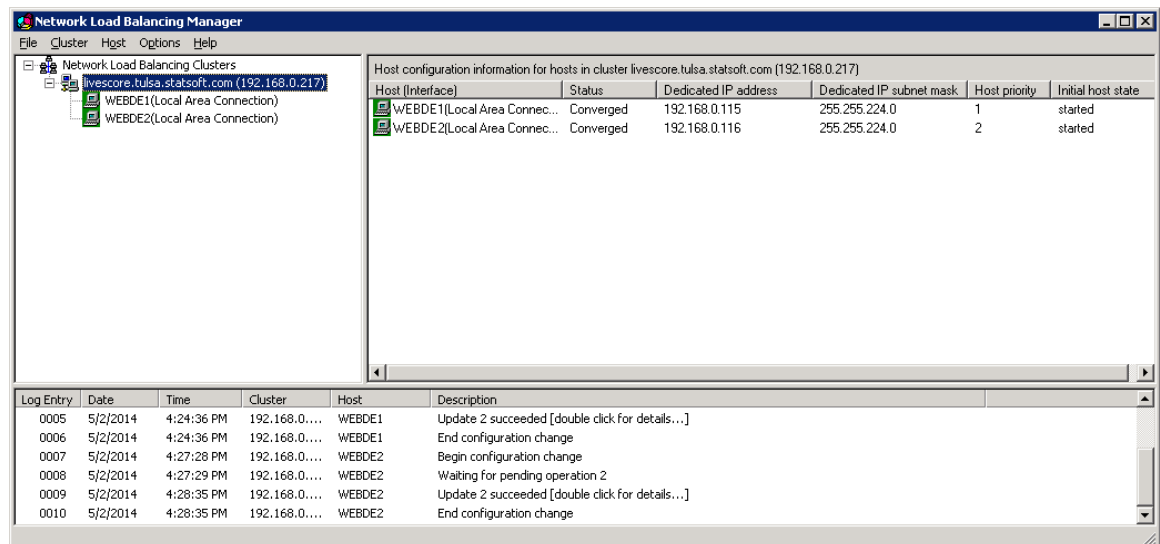
Default state:

Retain suspended state after computer restarts

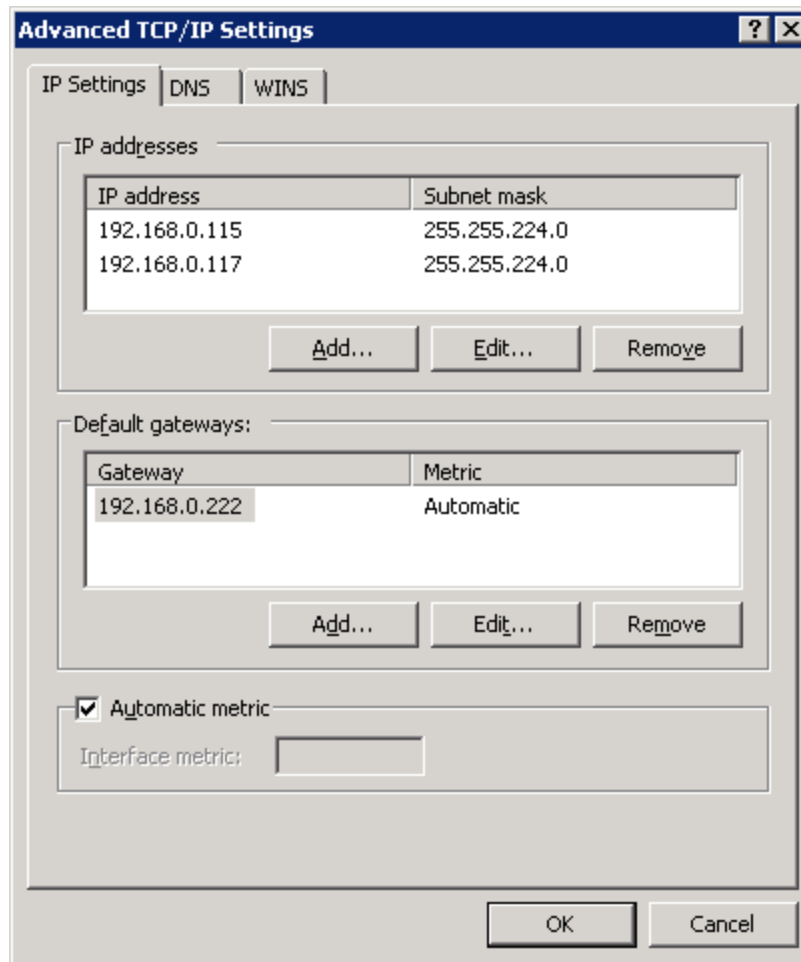
5. Also leave the defaults in the final dialog box, and click the **Finish** button.



6. After a short time, the new host is displayed as part of the cluster.



7. If you look at the TCP/IP properties of the network adapter used for the cluster you can see that the cluster IP has been added as an additional IP address.



Post installation steps

If you selected unicast mode when setting up the cluster, and each node in the cluster has only one network adapter, you might need to provide Statistica with certain license files to be resigned (if the License Service is installed to one of the nodes in the NLB cluster). You also need the new cluster MAC address. Open a command prompt and type `ipconfig /all` to acquire the new MAC address:

```

Administrator: C:\Windows\system32\cmd.exe
DNS Suffix Search List . . . . . : tulsa.statsoft.com

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix . . . . . : 
    Description . . . . . : Intel(R) PRO/1000 MT Network Connection
    Physical Address . . . . . : 02-BF-C0-A8-00-75
    DHCP Enabled. . . . . : No
    Autoconfiguration Enabled . . . . . : Yes
    IPv4 Address. . . . . : 192.168.0.115(Preferred)
    Subnet Mask . . . . . : 255.255.224.0
    IPv4 Address. . . . . : 192.168.0.117(Preferred)
    Subnet Mask . . . . . : 255.255.224.0
    Default Gateway . . . . . : 192.168.0.222
    DNS Servers . . . . . : 192.168.0.236
    : 192.168.0.233
    NetBIOS over Tcpip. . . . . : Enabled

Tunnel adapter isatap.<FC3EFC87-777C-4D16-87CD-E8258A0379ED>:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix . . . . . : 
    Description . . . . . : Microsoft ISATAP Adapter
    Physical Address . . . . . : 00-00-00-00-00-00-00-E0
    DHCP Enabled. . . . . : No
  
```

In this example, the licensing file needed would be: C:\Program Files (x86)\Statistica\FlexLM
\stat.lic

Troubleshooting

User Interface Slow to Load

If the Web Data Entry User Interface is slow to load after logging in, the list of recent samples might be too long. When that happens, populating a list is time-consuming. Try shortening the list of recent samples by changing the following **Application Settings**:

- GlobalRecentSamplesMaxNumber
- GlobalRecentSamplesNumberOfDays
- RecentSamplesMaxNumber
- RecentSamplesNumberOfDays

For more information, see the [System Options, IIS section](#).