



How to set up & configure GADD Dashboard Server 1.4

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GADD Dashboard Server - Configuration

1. Upgrading an existing version

The provided files should replace existing ones, make sure you back up any existing files you have touched.

1.1.1. web.config

There are many changes in Web.config so the recommendation is to use the provided web.config and just copy the connectionstring and any additions you've made from your existing web.config.

1.1.2. Location of dashboard xml files

The new location is /App_Data/Dashboards/<site name>/

1.1.3. Location of thumbnail images

/Custom/<site name>/images\

2. Global Configuration, web.config

These settings are made in web.config within the AppSettings element

2.1.1. Appsetting keys

global.defaultsite

Determines the default site and project.xml settings that should be used as the default when navigating to the root url, eg

global.scaffoldsites

Determines what sites that show up in admin.aspx and what sites that are automatically scaffolded when a project file does not exist. Values can be * or specific folders a,b,c

global.enablegoogleanalytics

When set to true setting will insert google analytics tracking code

global.cache.timeoutafterseconds

Determines when cache should timeout , default value is 5 minutes.

Files that are cached are Dashboard xml files, project.xml files, autocomplete values

If user changes a filter for a dashboard, this is stored in users session which is controlled by IIS settings (usually expires after 20 minutes if not renewed).

global.cache.datatable.timeoutafterseconds

Determines how long Direct query data is cached

global.sitetracking

When enabled visits will be tracked and saved in the database. none,full,partial

global.sitetrackingdbconnection

Adding an existing database connection name here will save visitor statistics to the specified database, example

```
<add key="global.sitetrackingdbconnection" value="GADD_GDS_RET_WEB" />
```

the value must be a valid connection name in dashboardConnections

it requires this module setting to be present in

```
<system.webServer>
```

```
  <modules runAllManagedModulesForAllRequests="true">
```

```
    <add name="GADDSessionHttpModule"
type="GADD.Dashboard.Web.Session.Controller.GADDSessionHttpModule,
GADD.Dashboard.Web" />
```

global.usersettingsdbconnection

When value is set to an existing connectionname from dashboardConnections , the users client filter settings will be saved to database

```
<add key="global.usersettingsdbconnection" value="GADD_GDS_RET_WEB" />
```

the value must be a valid connection name in dashboardConnections

global.comboboxseparatorchar

Use this to change the delimiter character used in the comboboxes client filter. This can be useful when there are commas in the values.

The configuration element below must be added to both GADD.Dashboard.Builder.exe.config and web.config to work for both windows and web dashboards.

```
<add key="global.comboboxseparatorchar" value=";" />
```

global.yearweekformat

Used when relative week is used in the client filter, default value is yyyyWW

```
<add key="global.yearweekformat" value="yyyyWW" />
```

global.yearmonthformat

This is used when relative month is used in the client filter, default value is yyyyMM

```
<add key="global.yearmonthformat" value="yyyyMM" />
```

savetransformeddashboards

Should only be used for troubleshooting, will save the translated and transformed xml to folder App_Data\Dashboards\<<sitename>\transformedxml

useencryption

if password encryption is in use

global.zoomdashboardenabled

If zoom scroll button should appear for smaller displays. Button will show up for windows smaller than 1300px wide.

When pressed dashboard will show with a predefined width and height and browser window will have scrollbars visible .

```
<add key="global.zoomdashboardenabled" value="true" />
```

global.zoomdashboardwidth

default width is 1900 px

```
<add key="global.zoomdashboardwidth" value="2560" />
```

global.zoomdashboardheight

default height is 1000 px

global.disableparameterencryption

when this is set to true the querystring request parameters does not have to be encrypted or even present for data to be displayed.

Used in the “salesboard” site

3. Site configuration

Each site within GADD Dashboard can have its own specific settings. These settings are found in project.xml. A configuration sample of project.xml can be found below.

The project.xml file is generated automatically if it doesn't exist project.xml elements are

3.1.1. Name

The name that should show up as title for the site

3.1.2. Queries

This list of queries is usually automatically generated from the sites dashboard xml files. It is used to display the grid of thumbnails on the index page for the site. The display name or description for each thumbnail can be changed using the elements Name and Description.

3.1.3. DefaultLanguage

This determines what language that should be default in case the users chosen browser accept-language is not among the available languages.

3.1.4. AvailableLanguages

List of languages available for translation. Default language must be one of these.

3.1.5. TranslationTableMap

This configuration will let you change the view or table the dashboard uses during runtime depending

on current users language.

See chapter Language specific tables/views for further details

3.1.6. HideBrowserNotSupportedMessage

If set to true it will hide the “unsupported browser” message that is shown when running IE in compatibility mode

3.1.7. EnableGridAddons

Will add additional features to the the grid of dashboard thumbnails. For example the description will show in a tooltip instead of underneath each thumbnail

3.1.8. EnableChromeFrame

If set to true and user is using IE 8 or below user will be prompted to install chrome frame.

To force the browser to use chrome frame the meta.txt file should contain this

```
<!--[if lte IE 8]>
    <meta http-equiv="X-UA-Compatible" content="chrome=1">
<![endif]-->
```

3.1.9. Users

If at least one User element is present in site.config, the site will require login

A user must have a userid and a password, the optional UserVariables list can be used to set filters for the data the user is allowed to access.

in the sample project below , user testSE will only see data where COUNTRY equals SE.

This requires that the datasource has a field named COUNTRY.

3.1.10. DashboardTheme

Currently two themes are supported Dark and Light (black or white background, Light is default).

Add or change the element <DashboardTheme>Light</DashboardTheme> in site.config.

Possible values are Light and Dark.

3.1.11. Sample Site.config (before named project.xml)

```
<?xml version="1.0" encoding="utf-8"?>
<Project xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <Name>SiteName</Name>
  <Queries>
    <Query>
      <Id>dashboard_1</Id>
      <Name>Dashboard name</Name>
      <Description>Dashboard Description</Description>
    </Query>
  </Queries>
```

```

<DefaultLanguage>sv</DefaultLanguage>
<AvailableLanguages>
  <string>fi</string>
  <string>sv</string>
</AvailableLanguages>
<TranslationTableMap >
  <TranslatedTable>
    <OriginalTableName>GADD_TABLE</OriginalTableName>
    <Languages>
      <LanguageTable>
        <LanguageCode>fi</LanguageCode>
        <TableName>GADD_TABLE_FI</TableName>
      </LanguageTable>
      <LanguageTable>
        <LanguageCode>sv</LanguageCode>
        <TableName>GADD_TABLE_SV</TableName>
      </LanguageTable>
    </Languages>
  </TranslatedTable>
</TranslationTableMap >
<Users>
  <User>
    <UserId>testSE</UserId>
    <Password>123</Password>
    <Variables>
      <UserVariable>
        <Key>COUNTRY</Key>
        <Value>SE</Value>
      </UserVariable>
    </Variables>
  </User>
  <User>
    <UserId>testUS</UserId>
    <Password>123</Password>
    <Variables>
      <UserVariable>
        <Key>COUNTRY</Key>
        <Value>US</Value>
      </UserVariable>
    </Variables>
  </User>

```



```

    </UserVariable>
  </Variables>
</User>
</Users>
<HideBrowserNotSupportedMessage>>true</HideBrowserNotSupportedMessage>
<EnableGridAddons>>false</EnableGridAddons>
<EnableChromeFrame>>false</EnableChromeFrame>
<DashboardTheme>Light</DashboardTheme>
</Project>

```

3.2. Dashboard Builder Configuration

3.2.1. App.config Keys

keepdataconnectiondetails

Default is false. Means that the data source information is not saved in the dashboard xml files. Setting this to true will save the connection information.

defaultdashboardpath

The default folder that is opened when pressing the Open button in the dashboard builder

ex: C:\Data\GADDDashboardWeb\Dashboards\

```
<add key="defaultdashboardpath" value=".\\App_Data\\Dashboards" />
```

defaultintrodashboard

Sets a dashboard that loads automatically when starting the application

ex:

```
<add key="defaultintrodashboard" value="EX_A/QS011_example_1.xml" />
```

enabledirectquery

By default direct query is disabled, to enable it add this to appsettings

```
<add key="enabledirectquery" value="true" />
```

useencryption

if password encryption is in use, will encrypt/decrypt passwords in connectionstrings (web.config and connections.config)

3.2.2. Connections

connections.config

The connections.config file is used to store connectionstrings to the database.

A connections.config file should exist in the site folder

For the samples site that comes with Dashboard Builder express it is located here
C:\Users\Public\Documents\GADD Dashboard
1.2\DashboardWeb\App_Data\Dashboards\Samples

Example of a connection string is

```
<connection connectionName="GADD_c" provider="MSSqlServer" serverName="s"  
database="d" userName="u" password="p" />
```

Oracle example

When selecting oracle this is added with empty login details in connection.config

```
<connection provider="Oracle" connectionName="xe_Connection" serverName="xe"  
database="" userName="gadd" password="gadd" />
```

In some cases the default oracle connection doesn't work, in this case select custom connection and use a connectionstring starting with XpoProvider=ODP;

Add below entry to connections.config and add your login details

```
<connection provider="XPO" connectionName="ocConnection" serverName=""  
database="XpoProvider=ODP;Data Source=xe;User ID=gadd;Password=gadd" userName=""  
password="" />
```

ODP.NET is required on the machine (tested with ODP.NET_Managed121012)

4. Features

4.1. Translations

The static text in dashboards can be translated by placing translation text files in folder

/App_Data/Dashboards/<site name>/translations/

The file name should be the ISO 2 character language code plus a .txt suffix (SV.txt, NN.txt).

The textfile should contain one original text and translation text, tab separated on each row, e.g.

original text 1 translated text 1

original text 2 translated text 2

Language specific tables/views

If the dynamic data displayed in the dashboards needs to be translated, the language specific tables/views can be used.

The dashboards contain the default table. By configuring the project.xml file this table can be replaced during runtime with another table containing data for the users current language code.

The configuration should be done within the element TranslationTableMap inside the project.xml file. See example above

The OriginalTableName is used to look in the dashboard xml it is then replaced with the TableName for the current LanguageCode.

4.2. Custom Content

To override or add custom stylesheet, javascript and head content files can be added to the folder \Custom\<sitename>\

Custom stylesheet should have file name **custom.css**

Custom Javascript should have file name **custom.js**

Additional content that should be placed between the <head> tags should be added to a file called **head.txt**

4.2.1. Custom index file

To serve custom default page for you site you create a file called index.htm and place it in the custom folder. This

4.3. Javascript variables

4.3.1. GADD.CurrentLanguageCode

A javascript block is inserted on every page with the language code in use. The variable GADD.CurrentLanguageCode will contain the current language code (sv,fi,nn,nb etc)

The available language codes for each site are configured in the site's project.xml using tag AvailableLanguages.

The browser's accept-language header is used to set the language code. If the language code is not

among the AvailableLanguages the DefaultLanguage from the project.xml file will be used.

4.4. Request Parameters

It is possible to limit the data presented using request parameters.

This can be useful when using a shared database and you want to limit the data each user can see on Company ID for example. To limit data access per user, the user variables set on user is a better option (see chapter User in Site Configuration).

Add a parameter map file so the dashboard knows what parameters to look for in

APP_DATA/<sitename>/custom/parametermap.txt

Sample content below (must be tab separated)

ColumnName	ParameterName	Operand
PAYMENT_TYPE	paymenttype	=
PRODUCT_TYPE	producttype	=

ColumnName is the field name in the database

ParameterName is the name used for the parameter in the URL

Operand can be =, like, etc

The values will be provided as request parameters

using a URL like

../test_dashboard?paymenttype=ACCOUNT&producttype=TENNIS

will filter the dashboard using these parameters

It is possible to encrypt the parameters so that it's not possible to switch the variables

This is done in the parametersample project described below

If the parameter=value is not present in the URL for the parameters in the file, An empty string will be assigned as criteria value and likely result in no data showing. Otherwise any data can be accessed just by omitting the parameters.

4.4.1. Encrypted Parameter Example

This ParameterSample shows how to integrate a GADD dashboard in an existing website (out of process), passing encrypted user/session variables from your website into the dashboard.

This example is included in the dashboard builder installation also viewable here

<http://dashboard.gaddsoftware.com/custom/parametersample/index.aspx>

The file

Custom\ParameterSample\index.aspx

Contains an Encrypt function that will encrypt the querystring.

Clicking on one of the three buttons shows a dashboard in an iframe, each button passes a different user id in an encrypted string to the dashboard.

The dashboard will filter the data based on the user id.

Make sure you change the encryption key “global.encryptionkey” in the appsettings in web.config, use any alphanumeric characters as key.

Other files for the encrypted parameter sample are located here

App_Data\Dashboards\ParameterSample

This folder contains a dashboard, an Excel sheet as datasource and parameter definition,

The parameter definition in parametermap.txt looks like this

ColumnName	ParameterName	Operand
USER_ID	userid	=

The dashboard will look for an encrypted `userid` parameter in the querystring and will only show data where column `USER_ID` equals the parameter value in the the data source (Excel sheet `GADD_PARAMETER_SAMPLE_DATA.xls`)

4.5. Caching

Dashboards and settings are cached.

To reload cache you can use the parameter `reloadcache` like this

`http://localhost:1250/dashboard/dash1?reloadcache=true`

to reload cache for the current dashboard

or

`http://localhost:1250/dashboard/dash1?reloadcache=all`

to clear the cache completely

4.6. Excel Datasource

For Dashboard web installation, the excel files are expected to be located in `/App_data/dashboards/<site name>/data/`

4.7. Password protecting a site

A site can be password protected by adding a user in the `site.config`, see chapter [Users in Site Configuration](#)

4.8. Dashboard Theme

Currently two themes are supported **Dark** and **Light** (black or white background, **Light** is default).

Add or change the element `<DashboardTheme>Light</DashboardTheme>` in `site.config` to set the theme for all dashboards in the site.

Add or change the element `<DashboardTheme>Light</DashboardTheme>` in the `dashboards config file (Dashboard_Name.config)` to set the theme for a specific dashboard.

Possible values are **Light** and **Dark**.

5. IIS Setup

5.1. New installation

Make sure .Net Framework 4 is installed.

To create a web site in IIS manager for IIS7 (and above)

Right click Sites, choose Add Website..

Enter the site name, “GADD Dashboard” for example

Set physical path to the location of the GADD.Dashboard.Web folder.

Press ok.

5.2. Setup GADD Dashboard as an Application (Virtual directory) in IIS

To install GADD Dashboard into an existing web site in IIS, GADD Dashboard needs to run as it’s own application(not virtual directory).

To add GADD Dashboard as an application.

Right click website where you want to add GADD Dashboard

1. Select Add Application
2. Name it GADDDashboard
3. Point to the source files (c:\data\GADD_Dashboard for example)

Note: Setting up GADD Dashboard in a virtual directory is possible but requires the web.config content to be transferred to the web.config of the existing site.

5.3. Troubleshooting

5.3.1. Error 500.19 Internal Server error

This configuration section cannot be used at this path. This happens when the section is locked at a parent level.

There are a couple of solutions to this problem

<http://stackoverflow.com/questions/9794985/iis-this-configuration-section-cannot-be-used-at-this-path-configuration-lock>

If you want to edit the file by hand

Open the applicationHost.config file, located here:

%windir%\system32\inetsrv\config\applicationHost.config

Find the “handlers” section and Change this line:

```
<section name="handlers" overrideModeDefault="Deny" />
```

To:

```
<section name="handlers" overrideModeDefault="Allow" />
```

Or open a command prompt using administrator privileges (**run as administrator**) and paste the following line to change the file

```
%windir%\system32\inetsrv\appcmd unlock config -section:system.webServer/handlers
```

When the handles are allowed, there might be a similar error pointing out "modules" instead of "handlers"

Use the same procedure above but replace "handlers" with "modules", executing this line in the command prompt

```
%windir%\system32\inetsrv\appcmd unlock config -section:system.webServer/modules
```

5.3.2. HTTP Error 403.14 - Forbidden

Browsing to the website might result in this error

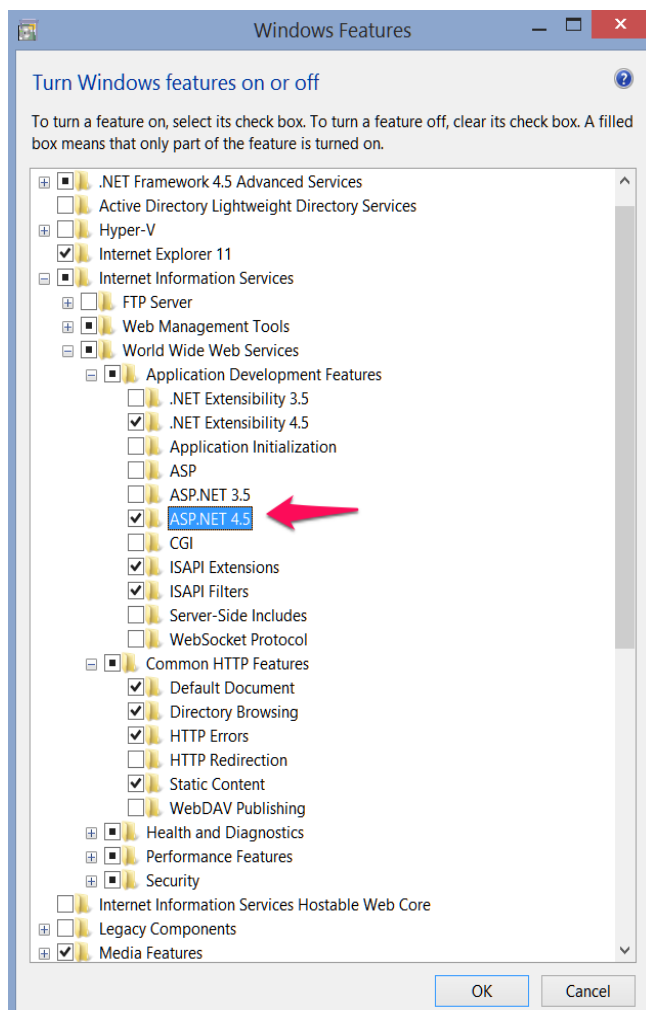
If you have not installed Microsoft .NET framework 4 or 4.5 then download (dotNetFramework4) google Microsoft .NET Framework 4.5 download and pick a download from microsoft.com

Install after downloading

Register it in IIS using either control panel or command prompt

Using Control panel

control panel -> program and features -> turn windows features on or off
tick the ASP.NET 4(.5) checkbox



Using command prompt

command. Start command as Administrator. That is; Run As Administrator.

Then enter command:

for x64)

```
%windir%\Microsoft.NET\Framework64\v4.0.30319\aspnet_regiis.exe /i
```

```
for x86) %windir%\Microsoft.NET\Framework\v4.0.30319\aspnet_regiis.exe /i
```

5.3.3. IIS 6 routing does not work

You get error “Page can not be found” when navigating to a dashboard

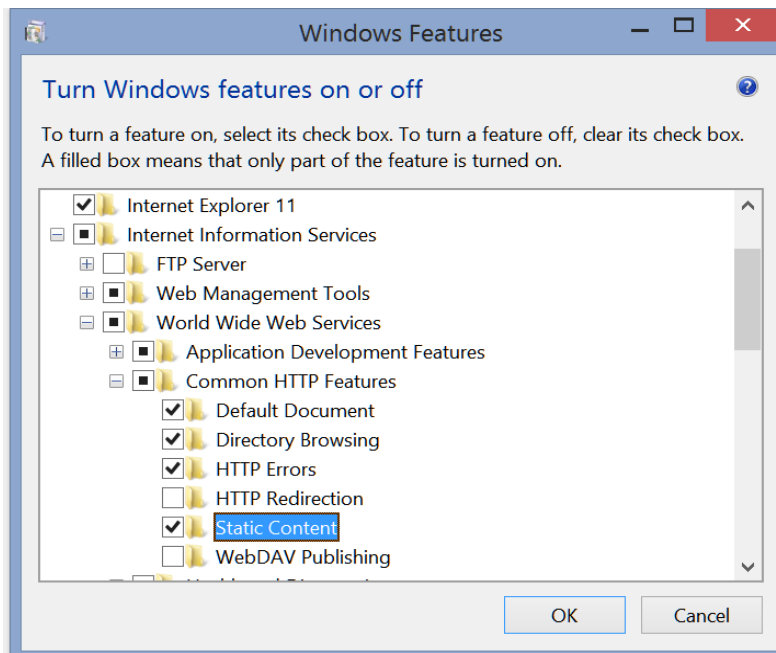
On the server, open IIS:

1. Right-click on the site/virtual directory, select properties
2. Goto the Home Directory/Virtual Directory tab, click Configuration (near the bottom)
3. Near the bottom again, click the insert button
4. Enter **C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_isapi.dll**
5. Alternate: Enter
C:\WINDOWS\Microsoft.NET\Framework\v4.0.30319\aspnet_isapi.dll for ASP.NET 4.0
6. **Uncheck** the "Verify that file exists" button, click Okay and close all the dialogues

5.3.4. The jquery library has not been registered or css is not displaying correctly

Problem with serving static content.

Enable by going to Turn windows features on/off in control panel Programs and features



5.3.5. PostgreSQL - Using a custom port number

It is possible to use a custom connectionstring to connect to a custom port on postgresql, default port is 5432, example

```
XpoProvider=Postgres;Server=127.0.0.1;User ID=postgres;Password=pass;Database=Test;Port=5999
```

För att sedan få det att fungera i webb måste man byta ut "custom" dataconnection elementet mot ett "postgres" element

Så i en text editor, i början på dashboard filen byt från

```
<?xml version="1.0" encoding="utf-8"?>
<Dashboard CurrencyCulture="en-US">
  <Title Text="Dashboard3" />
  <DataConnections>
    <DataConnection Name="localhost_Connection"
    ConnectionString="XpoProvider=Postgres;Server=127.0.0.1;User
    ID=postgres;Password=pass;Database=Test;Port=5999&#xD;&#xA;" />
  </DataConnections>
```

Till

```
<?xml version="1.0" encoding="utf-8"?>
<Dashboard CurrencyCulture="en-US">
  <Title Text="Dashboard1" />
  <DataConnections>
    <DataConnection Name="localhost_Connection" ProviderKey="Postgres">
      <Parameters>
        <Parameter Name="server" Value="localhost" />
        <Parameter Name="database" Value="Test" />
        <Parameter Name="read only" Value="1" />
        <Parameter Name="generateConnectionHelper" Value="false" />
      </Parameters>
    </DataConnection>
  </DataConnections>
  <DataSources>
```

Här kan man inte ange portnr, behövs inte heller då connections.config kommer ange portnr. Viktigt att namnet på connection stämmer med det i connections.config (**Name="localhost_Connection"** i ovanstående xml)

Connections.config exempel

```
<connection provider="Postgres" connectionName="localhost_Connection" serverName="127.0.0.1:5999"
database="Test" userName="u" password="p" />
```