



HARRIS
GOVERN



201-egov Installation eGovern Deployment on Windows Server 2016 Govern V6

Release 6.0/6.1 Version 1

Last Revision Update: 12/13/2018

[illegible]

Disclaimer

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Deploy eGovern in Windows Server 2016 Environment

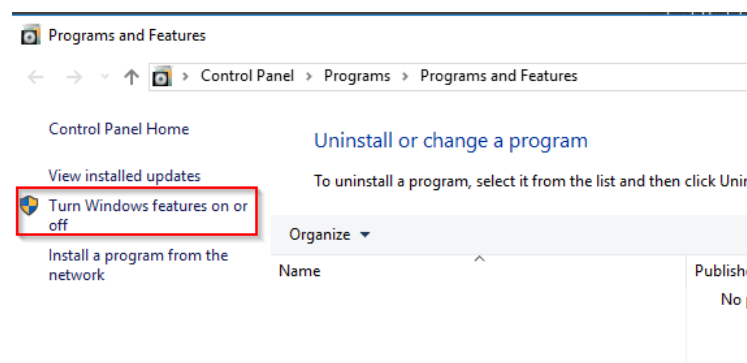
Overview

The Govern Public Web Portal is an e-Government services application that contains a set of modules that provide citizens and professionals public access via the Internet in order to apply, query, request and view information. The ability to make online transactions regarding permits, inspections, real property tax, utility billing, tax assessment, personal property, special assessment, complaints status and multimedia documents brings a new level of efficiency to managing a jurisdiction's information. The following are installation steps for deployment of the eGovern – Public Self Service Portal.

Installation Steps

STEP 1 - Install Internet Information Services (IIS)

Open the Programs and Features



Programs and Features

Control Panel Home

Uninstall or change a program

View installed updates

Turn Windows features on or off

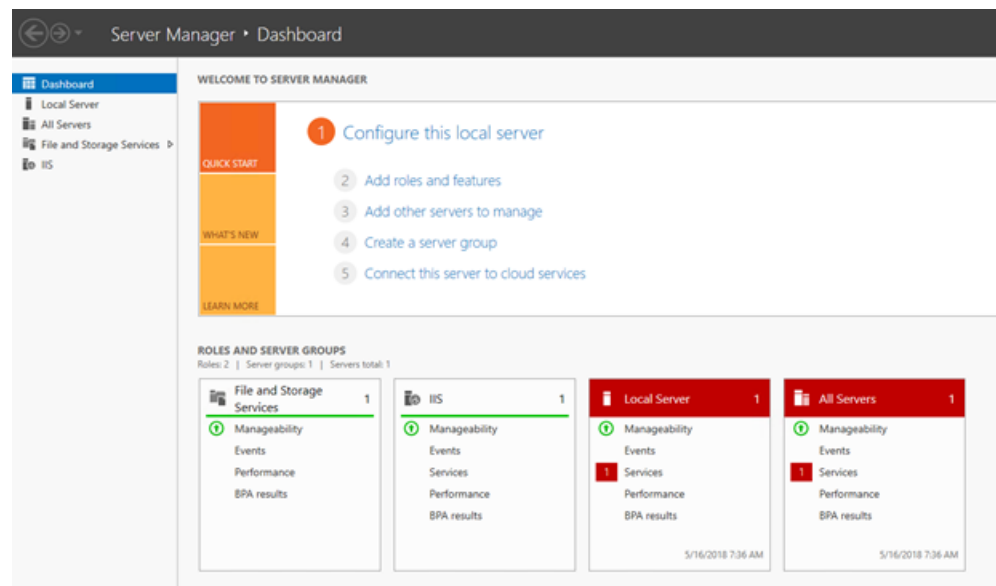
To uninstall a program, select it from the list and then click Uninstall

Organize

Name

Publish

No



Server Manager • Dashboard

WELCOME TO SERVER MANAGER

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

5 Connect this server to cloud services

ROLES AND SERVER GROUPS

Roles: 2 | Server groups: 1 | Servers total: 1

File and Storage Services	IIS	Local Server	All Servers
1	1	1	1
Manageability	Manageability	Manageability	Manageability
Events	Events	Events	Events
Performance	Services	Services	Services
BPA results	Performance	Performance	Performance
	BPA results	BPA results	BPA results
		5/16/2018 7:36 AM	5/16/2018 7:36 AM

Add Roles and Features Wizard

Before you begin

DESTINATION SERVER
MTL-WEB-FX01.harriscomputer.com

Before You Begin

Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

This wizard helps you install roles, role services, or features. You determine which roles, role services, or features to install based on the computing needs of your organization, such as sharing documents, or hosting a website.

To remove roles, role services, or features:
[Start the Remove Roles and Features Wizard](#)

Before you continue, verify that the following tasks have been completed:

- The Administrator account has a strong password
- Network settings, such as static IP addresses, are configured
- The most current security updates from Windows Update are installed

If you must verify that any of the preceding prerequisites have been completed, close the wizard, complete the steps, and then run the wizard again.

To continue, click Next.

☐ Skip this page by default

< Previous **Next >** Install Cancel

Next

Add Roles and Features Wizard

Select installation type

DESTINATION SERVER
MTL-WEB-FX01.harriscomputer.com

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).

☒ **Role-based or feature-based installation**
Configure a single server by adding roles, role services, and features.

☐ **Remote Desktop Services installation**
Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.

< Previous **Next >** Install Cancel

Add Roles and Features Wizard

Select destination server

DESTINATION SERVER
MTL-WEB-FX01.harriscomputer.com

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

Select a server or a virtual hard disk on which to install roles and features.

☒ Select a server from the server pool
☐ Select a virtual hard disk

Server Pool

Filter:

Name	IP Address	Operating System
MTL-WEB-FX01.harrisco...	192.168.60.22	Microsoft Windows Server 2016 Standard

1 Computer(s) found

This page shows servers that are running Windows Server 2012 or a newer release of Windows Server, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.

< Previous **Next >** Install Cancel

Add Roles and Features Wizard

Select server roles

DESTINATION SERVER
MTL-WEB-FX01.harriscomputer.com

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

Select one or more roles to install on the selected server.

Roles

- Web Server (IIS) (13 of 43 installed)
 - Web Server (11 of 34 installed)
 - Common HTTP Features (4 of 6 installed)
 - Default Document (Installed)
 - Directory Browsing (Installed)
 - HTTP Errors (Installed)
 - Static Content (Installed)
 - HTTP Redirection
 - WebDAV Publishing
 - Health and Diagnostics (1 of 6 installed)
 - HTTP Logging (Installed)
 - Custom Logging
 - Logging Tools
 - ODBC Logging
 - Request Monitor
 - Tracing
 - Performance (1 of 2 installed)
 - Static Content Compression (Installed)
 - Dynamic Content Compression
 - Security (1 of 9 installed)
 - Request Filtering (Installed)
 - Basic Authentication
 - Centralized SSL Certificate Support
 - Client Certificate Mapping Authentication
 - Digest Authentication
 - IIS Client Certificate Mapping Authentication
 - IP and Domain Restrictions
 - URL Authorization
 - Windows Authentication
 - Application Development (4 of 11 installed)
 - .NET Extensibility 3.5
 - .NET Extensibility 4.6 (Installed)
 - Application Initialization
 - ASP
 - ASP.NET 3.5
 - ASP.NET 4.6 (Installed)
 - CGI
 - ISAPI Extensions (Installed)
 - ISAPI Filters (Installed)
 - Server Side Includes
 - WebSocket Protocol
 - FTP Server
 - Management Tools (2 of 7 installed)
 - IIS Management Console (Installed)
 - IIS 6 Management Compatibility (1 of 4 installed)
 - IIS 6 Metabase Compatibility (Installed)
 - IIS 6 Management Console
 - IIS 6 Scripting Tools
 - IIS 6 WMI Compatibility

Description

Application Development provides infrastructure for developing and hosting Web applications. Use these features to create Web content or extend the functionality of IIS. These technologies typically provide a way to perform dynamic operations that result in the creation of HTML output, which IIS then sends to fulfill client requests.

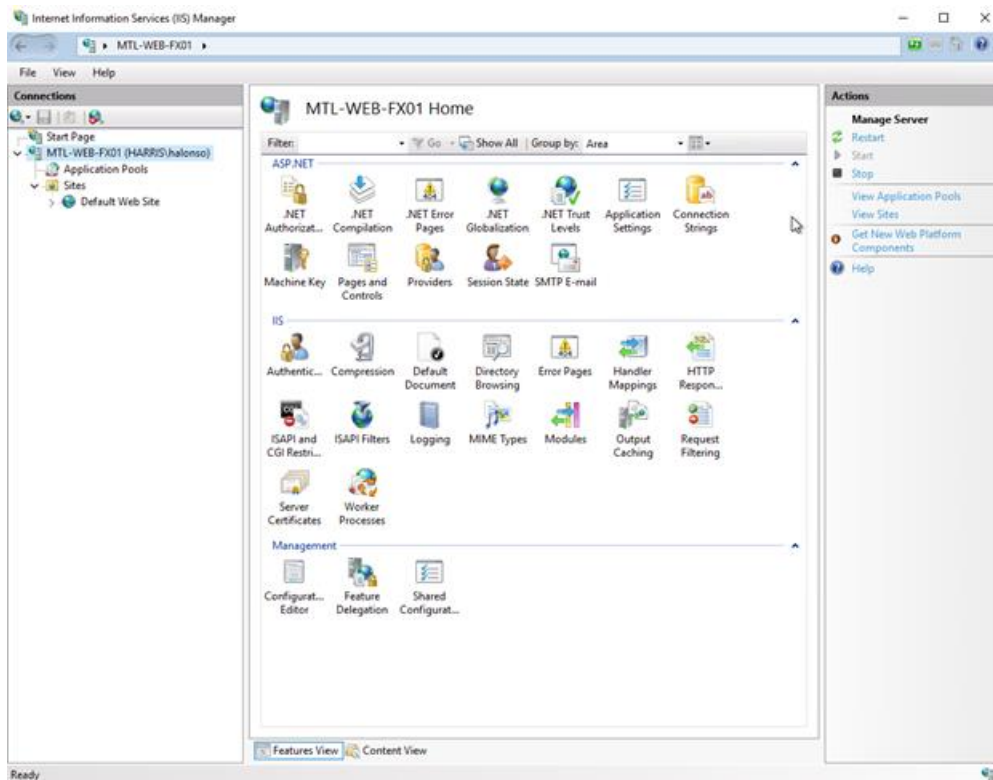
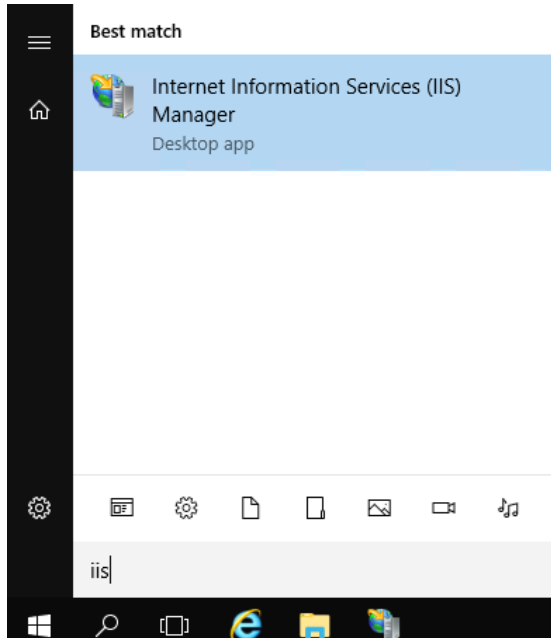
< Previous **Next >** Install Cancel

Installation

Once the installation is complete, click **Close**.

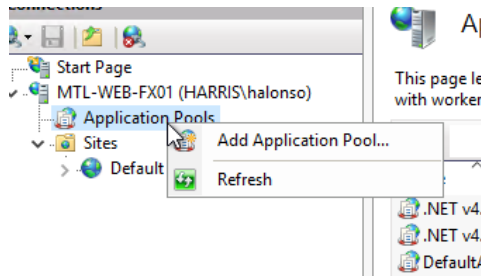
STEP 2 – Create the eGovern Site

Open the Internet Information Services (IIS) Manager

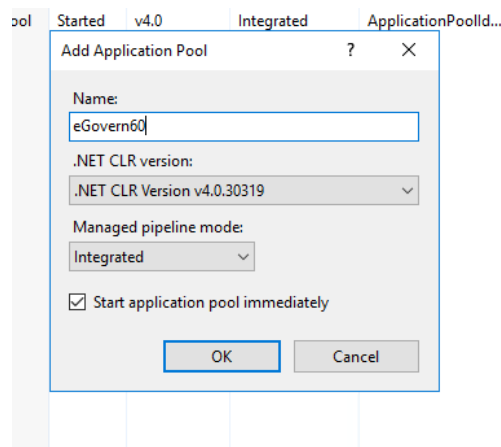


Create and Select Application Pools

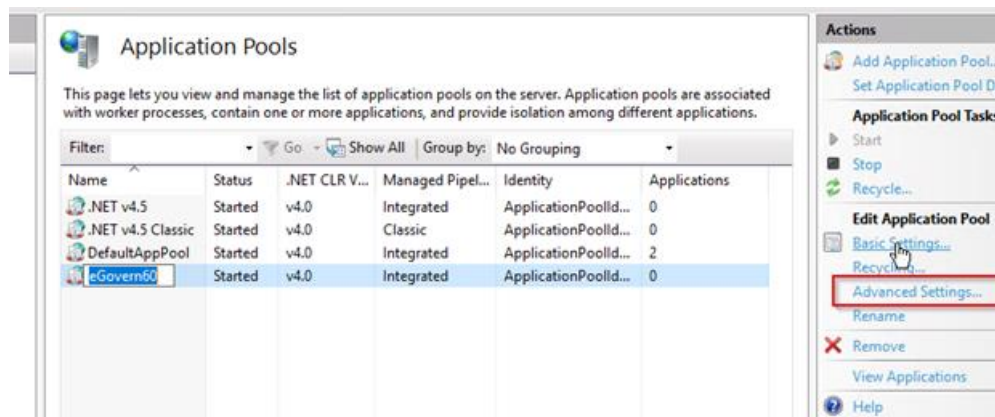
1. Right - click on Application Pools to display the menu and select **Add Application Pool**.



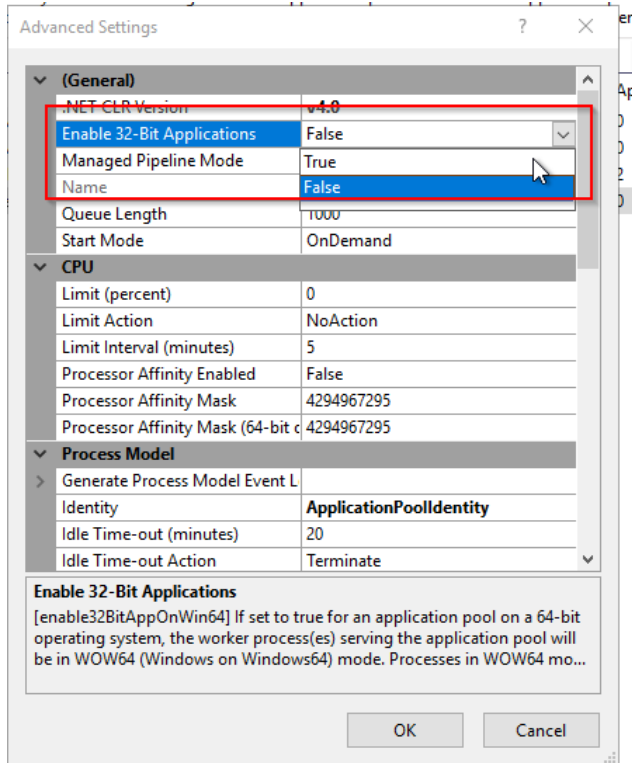
2. In the Add Application Pool form, click in the Name parameter and enter an application name; click **OK**.



3. In the Application Pools form, click to select the new application pool.
4. On the *Actions* pane on the right hand side (RHS), click to select **Advanced Settings...**

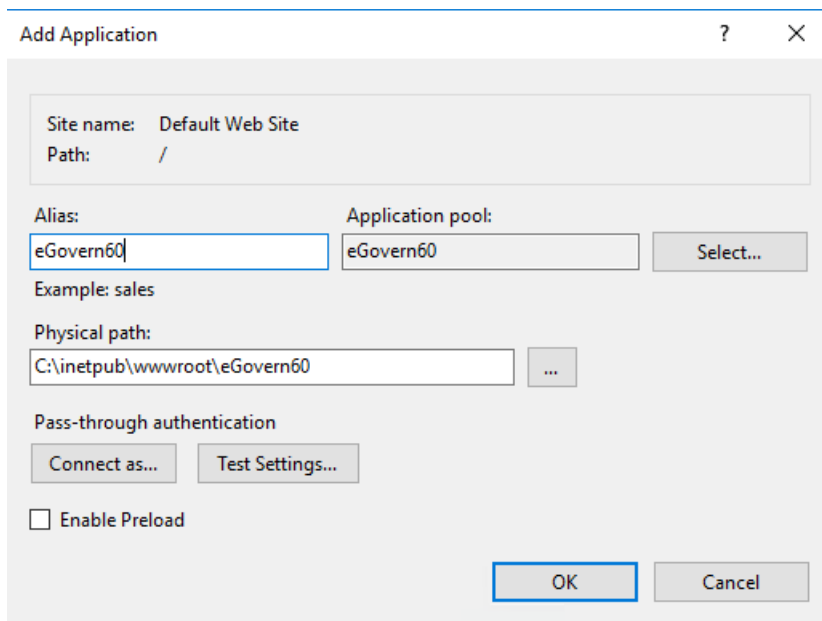


In the Advanced Settings form, under the **(General)** group, set the *Enable 32-Bit Applications* settings to **True** in the combo box; click **OK**.



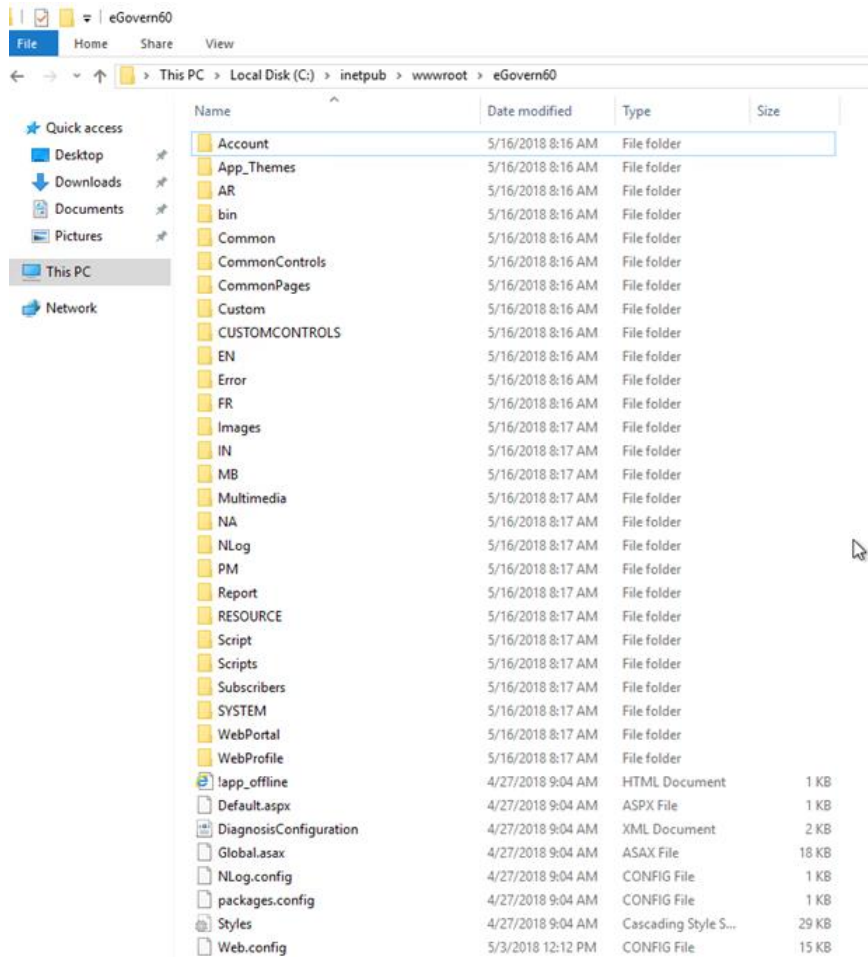
Go to the sites. Right click over **Default Web Site** click right and click on **Add Application**

Set the the **Alias**, the **Application pool** (the one that was created) and set the **Physical Path** and click **OK**.



The new site is created in your **IIS**

Copy the **eGovern** package to the **Physical path**, that should looks like this.



Name	Date modified	Type	Size
Account	5/16/2018 8:16 AM	File folder	
App_Themes	5/16/2018 8:16 AM	File folder	
AR	5/16/2018 8:16 AM	File folder	
bin	5/16/2018 8:16 AM	File folder	
Common	5/16/2018 8:16 AM	File folder	
CommonControls	5/16/2018 8:16 AM	File folder	
CommonPages	5/16/2018 8:16 AM	File folder	
Custom	5/16/2018 8:16 AM	File folder	
CUSTOMCONTROLS	5/16/2018 8:16 AM	File folder	
EN	5/16/2018 8:16 AM	File folder	
Error	5/16/2018 8:16 AM	File folder	
FR	5/16/2018 8:16 AM	File folder	
Images	5/16/2018 8:17 AM	File folder	
IN	5/16/2018 8:17 AM	File folder	
MB	5/16/2018 8:17 AM	File folder	
Multimedia	5/16/2018 8:17 AM	File folder	
NA	5/16/2018 8:17 AM	File folder	
NLog	5/16/2018 8:17 AM	File folder	
PM	5/16/2018 8:17 AM	File folder	
Report	5/16/2018 8:17 AM	File folder	
RESOURCE	5/16/2018 8:17 AM	File folder	
Script	5/16/2018 8:17 AM	File folder	
Scripts	5/16/2018 8:17 AM	File folder	
Subscribers	5/16/2018 8:17 AM	File folder	
SYSTEM	5/16/2018 8:17 AM	File folder	
WebPortal	5/16/2018 8:17 AM	File folder	
WebProfile	5/16/2018 8:17 AM	File folder	
!app_offline	4/27/2018 9:04 AM	HTML Document	1 KB
Default.aspx	4/27/2018 9:04 AM	ASPX File	1 KB
DiagnosisConfiguration	4/27/2018 9:04 AM	XML Document	2 KB
Global.asax	4/27/2018 9:04 AM	ASAX File	18 KB
NLog.config	4/27/2018 9:04 AM	CONFIG File	1 KB
packages.config	4/27/2018 9:04 AM	CONFIG File	1 KB
Styles	4/27/2018 9:04 AM	Cascading Style S...	29 KB
Web.config	5/3/2018 12:12 PM	CONFIG File	15 KB

Edit your **web.config** file in the **<appSettings>** section.

Set the following:

- *GovernNetConfig* to C:\inetpub\wwwroot\eGovern60\GovernNetConfig.xml
- *WebSite_Id* to your Web Site Id (the id that will be use for your site in the web site editor in GNA)
- *WebReportDirectoryPath* C:\inetpub\wwwroot\eGovern60\REPORTS\

```
<appSettings>
  <!-- MSGovern configuration file-->
  <add key="MSGovern.GovernNetConfig" value="C:\inetpub\wwwroot\eGovern60\GovernNetConfig.xml" />
  <add key="MSGovern.SynchFileAndFolders" value="FALSE" />
  <add key="MSGovern.CopyFilesAndFoldersLocally" value="FALSE" />
  <add key="MSGovern.PaxInstallationFolderPath" value="C:\Program Files (x86)\PAX\POSLink" />
  <add key="GovernSoftware.WebSite_Id" value="1" />
  <add key="GovernSoftware.DefaultPage" value="WEBPROFILE" />
  <add key="GovernSoftware.UploadDirectory" value="C:\Dummy\" />
  <add key="GovernSoftware.UploadMaxFileSize" value="5048576" />
  <add key="GovernSoftware.Version_dnet" value="3" />
  <add key="GovernSoftware.DisplayBuildVersion" value="Off" />
  <add key="GovernSoftware.TraceArTransactionResponse" value="Off" />
  <add key="GovernSoftware.WebReportDirectoryPath" value="C:\inetpub\wwwroot\eGovern60\REPORTS\" />
  <add key="GovernSoftware.WebReportViewerWidth" value="875" />
  <add key="GovernSoftware.WebReportViewerHeight" value="1200" />
  <add key="GovernSoftware.WebReportViewerZoomFactor" value="100" />
  <add key="GovernSoftware.WebReportViewerWidthLandscape" value="1080" />
  <add key="GovernSoftware.WebReportViewerHeightLandscape" value="825" />
  <add key="GovernSoftware.WebReportViewerZoomFactorLandscape" value="100" />
  <add key="GovernSoftware.ShowHelpPath" value="False" />
  <add key="GovernSoftware.DebugMode" value="False" />
  <add key="GovernSoftware.ReportDebugMode" value="False" />
  <!-- Temporary Setup- Must add in GNA -->
  <!--<add key="GovernSoftware.GisServerName" value="mtldev01"/> -->
  <!--<add key="GovernSoftware.GisGeoDataBaseName" value="Layers@Juneau"/> -->
  <!--<add key="GovernSoftware.AutoLogin.Login" value="+SfJF+/cy3RmUG6brJBR9b5i/a+ycLok"/> -->
  <!--<add key="GovernSoftware.AutoLogin.Password" value="47rYbcSyyx6cMKx6ZhEn6QwF0KG4tNoq"/> -->
</appSettings>
```

Copy the GovernNetConfig.xml and the GovernDABConfig

Edit your GovernNetConfig and set

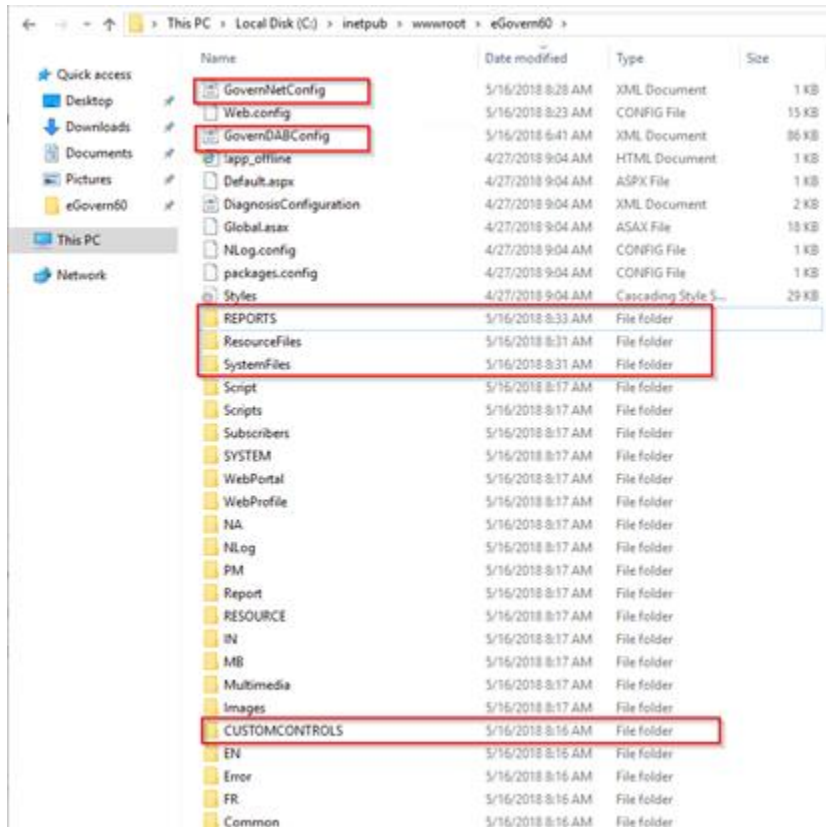
- databaseConfigFilesFolder
- connectionKeysFileFolder
- DefaultConnectionKey
- CustomControlDirectory
- ResourceLocation
- SystemFiles

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <databaseConfigFilesFolder>C:\inetpub\wwwroot\eGovern60\</databaseConfigFilesFolder>
  <connectionKeysFileFolder>C:\inetpub\wwwroot\eGovern60\</connectionKeysFileFolder>
  <DefaultConnectionKey>MECKLENBURG_MTL-SQL2014_SQL</DefaultConnectionKey>
  <CustomControlDirectory>C:\inetpub\wwwroot\eGovern60\CustomControls\</CustomControlDirectory>
  <ResourceFileName>GovernNet</ResourceFileName>
  <ResourceLocation>C:\inetpub\wwwroot\eGovern60\ResourceFiles</ResourceLocation>
  <SystemFiles>C:\inetpub\wwwroot\eGovern60\SystemFiles</SystemFiles>
  <SerialNumber>150004-97536868864-3119AF</SerialNumber>
  <OrganizationName>MS Govern - Demo</OrganizationName>
  <DefaultSkin>MsGovernBlack</DefaultSkin>
  <DefaultCulture>en-us</DefaultCulture>
  <SupportedCultures>en-us</SupportedCultures>
  <AuthenticationType>MSAD</AuthenticationType>
  <askForConnectionKeyAtStartup>True</askForConnectionKeyAtStartup>
  <LDAPPath />
</configuration>
```

Create the folders in your IIS folder (in this case C:\inetpub\wwwroot\eGovern60)

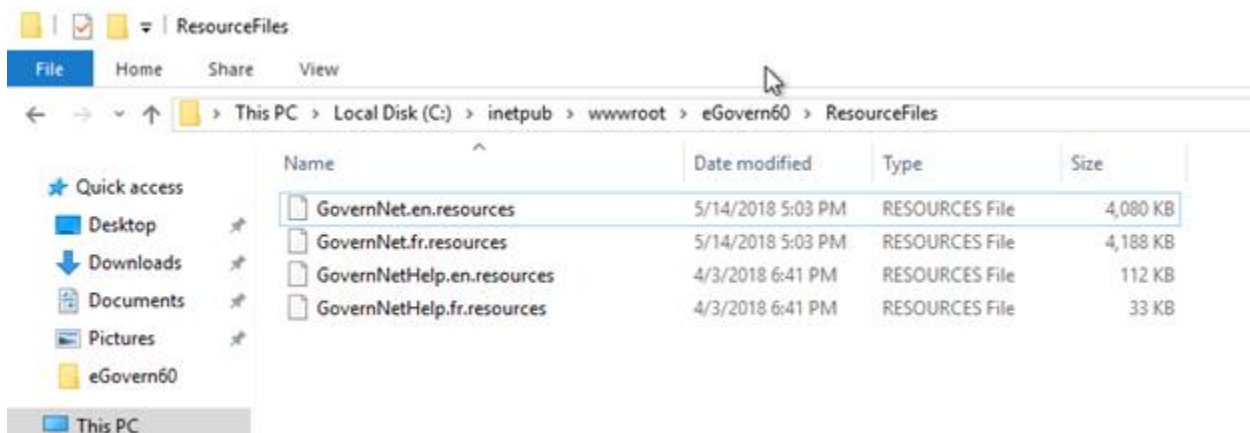
- REPORTS
- ResourceFiles

- SystemFiles
- CUSTOMCONTROLS



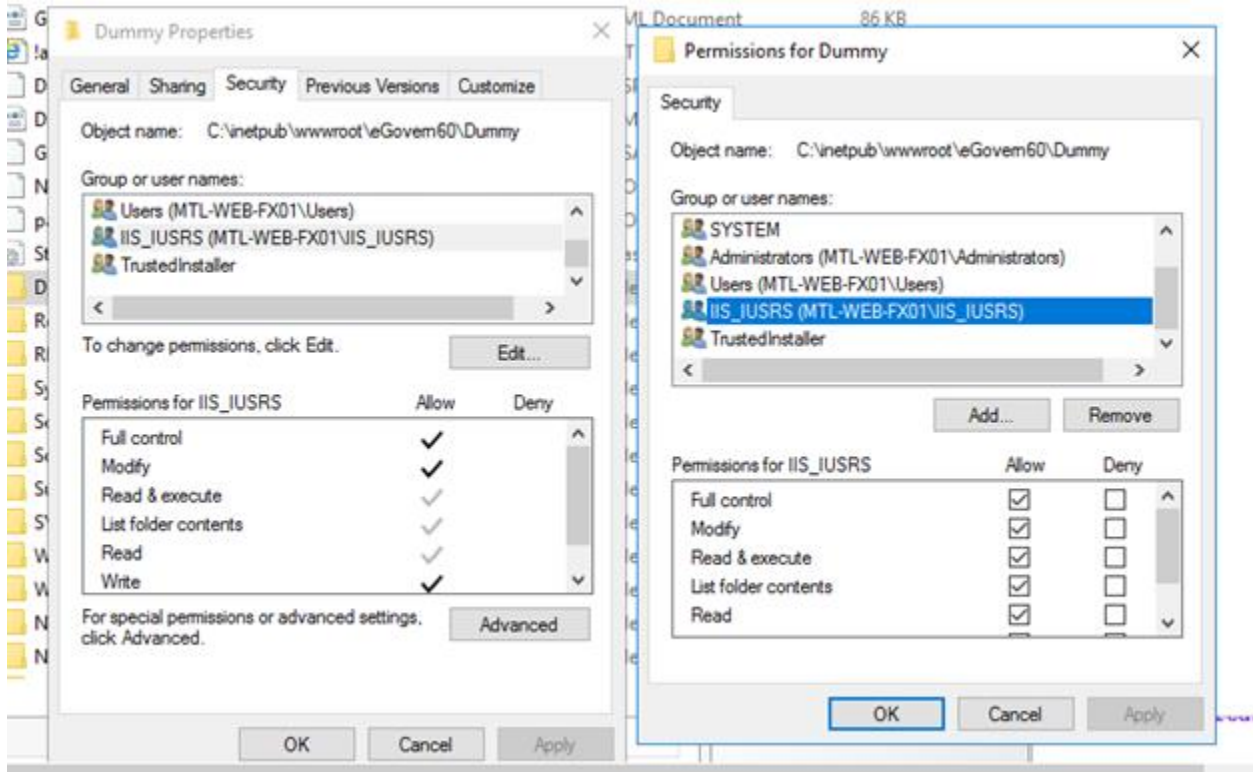
Name	Date modified	Type	Size
GovernNetConfig	5/16/2018 8:28 AM	XML Document	1 KB
Web.config	5/16/2018 8:23 AM	CONFIG File	15 KB
GovernDABConfig	5/16/2018 8:41 AM	XML Document	86 KB
app_offline	4/27/2018 9:04 AM	HTML Document	1 KB
Default.aspx	4/27/2018 9:04 AM	ASPX File	1 KB
DiagnosisConfiguration	4/27/2018 9:04 AM	XML Document	2 KB
Global.asax	4/27/2018 9:04 AM	ASAX File	18 KB
NLog.config	4/27/2018 9:04 AM	CONFIG File	1 KB
packages.config	4/27/2018 9:04 AM	CONFIG File	1 KB
Styles	4/27/2018 9:04 AM	Cascading Style S...	29 KB
REPORTS	5/16/2018 8:33 AM	File folder	
ResourceFiles	5/16/2018 8:31 AM	File folder	
SystemFiles	5/16/2018 8:31 AM	File folder	
Script	5/16/2018 8:17 AM	File folder	
Scripts	5/16/2018 8:17 AM	File folder	
Subscribers	5/16/2018 8:17 AM	File folder	
SYSTEM	5/16/2018 8:17 AM	File folder	
WebPortal	5/16/2018 8:17 AM	File folder	
WebProfile	5/16/2018 8:17 AM	File folder	
NA	5/16/2018 8:17 AM	File folder	
NLog	5/16/2018 8:17 AM	File folder	
PM	5/16/2018 8:17 AM	File folder	
Report	5/16/2018 8:17 AM	File folder	
RESOURCE	5/16/2018 8:17 AM	File folder	
IN	5/16/2018 8:17 AM	File folder	
MB	5/16/2018 8:17 AM	File folder	
Multimedia	5/16/2018 8:17 AM	File folder	
Images	5/16/2018 8:17 AM	File folder	
CUSTOMCONTROLS	5/16/2018 8:16 AM	File folder	
EN	5/16/2018 8:16 AM	File folder	
Error	5/16/2018 8:16 AM	File folder	
FR	5/16/2018 8:16 AM	File folder	
Common	5/16/2018 8:16 AM	File folder	

Copy **ResourceFiles** to the directory at the end of the following path
 C:\inetpub\wwwroot\eGovern60\ResourceFiles



Name	Date modified	Type	Size
GovernNet.en.resources	5/14/2018 5:03 PM	RESOURCES File	4,080 KB
GovernNet.fr.resources	5/14/2018 5:03 PM	RESOURCES File	4,188 KB
GovernNetHelp.en.resources	4/3/2018 6:41 PM	RESOURCES File	112 KB
GovernNetHelp.fr.resources	4/3/2018 6:41 PM	RESOURCES File	33 KB

Create a new folder in C:\inetpub\wwwroot\eGovern60\Dummy; give **Read / Write** access to IIS_IUSRS.

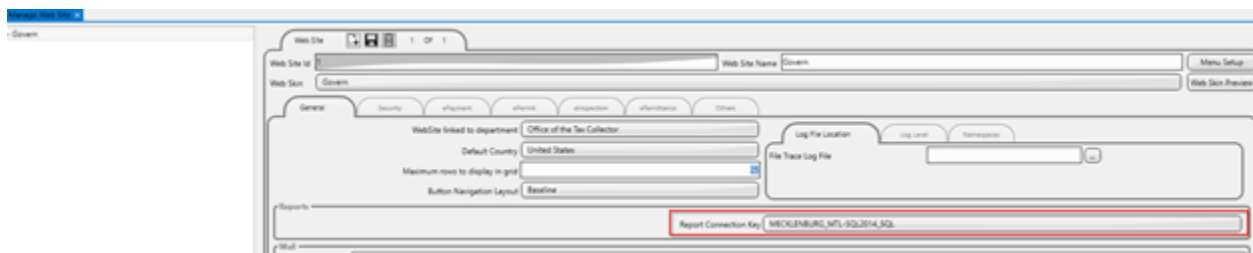


STEP 3 – Crystal Reports Installation

Install the Crystal Reports Runtime

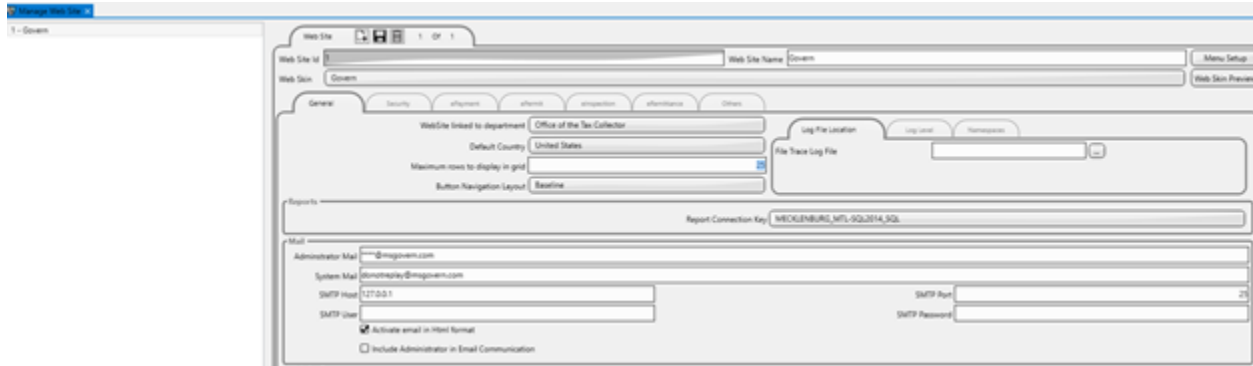
Copy the folder C:\inetpub\wwwroot\aspnet_client to C:\inetpub\wwwroot\eGovern60\aspnet_client

Set your connection key for the reports in **GNA**.



STEP 4 – SMTP Mail Configuration

The following steps are used for configuration of an SMTP Server of your choice in the *Govern New Administration (GNA)*.



The screenshot shows the 'Manage Web Site' console for the 'eGovern' web site. The 'General' tab is selected, showing fields for 'Web Site Name' (eGovern), 'Default Country' (United States), 'Maximum rows to display in grid' (10), and 'Button Navigation Layout' (Baseline). The 'Mail' section shows 'Administrator Mail' (admin@egovern.com) and 'System Mail' (admin@egovern.com). The 'SMTP' section shows 'SMTP Host' (127.0.0.1), 'SMTP Port' (25), and 'SMTP User' (admin@egovern.com). The 'SMTP Password' field is empty. The 'Report Connection Key' is 'WECKENBURG_MPL-SQL2014_SQL'.

SMTP Test Server

For debugging and testing you can set up an SMTP test server using tools like **SMTP for Dev** or **PaperCut**. Both of these applications can be found at the URL's below.

SMTP for Dev - (<https://github.com/rnwood/smtp4dev/releases>) or

PaperCut - (<https://github.com/ChangemakerStudios/Papercut/releases>)

Troubleshooting

Debugging the Site

The eGovern site can be placed in a mode of operation that will allow you to debug issues that may present themselves with the site. When configured for debug mode errors in the site it is possible to remove the custom error setting in the web.config the custom errors mode to Off

```
-->
<customErrors mode="Off" defaultRedirect="~/CommonPages/ErrorPage.aspx" />
<!-- DYNAMIC DEBUG COMPILATION
Set compilation debug="true" to insert debugging symbols (.pdb information) into the com
```

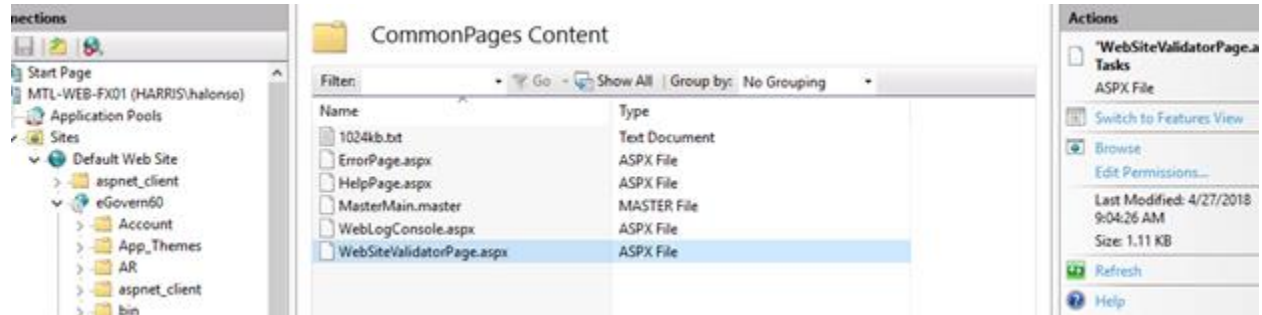
eGovern Validation Page

In order to validate the installation, i.e. confirm that your configuration is correct, a validation page is generated by the system. This page can be viewed with a web browser that is able to view .ASPX pages, e.g. *Microsoft Internet Explorer* or *Microsoft Edge*. The URL for the **WebSiteValidatorPage** page is (<http://your site/CommonPages/WebSiteValidatorPage.aspx>)

The validation page may also be accessed through the *IIS Manager* console.

To view the validation page in the IIS Manager...

1. Open the IIS Manager.
2. Select WebSiteValidatorPage.aspx and click on Browse in the Action Panel.



Videos

The following is a link to a How To Video on installing and debugging an eGovern deployment. Click the link to view the video <https://www.screencast.com/t/DIX0XQivU>

Test Environments

Govern has configured the following test environments to view a release 6.0 and 6.1 configuration.

eGovern 6.0.1803 – <http://test.msgovern.com/eGovern60/>

eGovern 6.1.1803 – <http://test.msgovern.com/eGovern61/>