



**r&d MONTREAL**

**Govern OpenForms Release 1603**  
**Services and Batch Processing**

Presented by:  
Benoît Lauzon, Michelle Gagné  
*April 11, 2016*

# Agenda

- Batch Processing
  - Batch Scheduler Services Installation

# Batch Processing / Govern Scheduler

Batch Processing Overview  
Govern Scheduler & Services  
Installation

# Batch Processing

Introduction

# Resources

- Wiki Resources

- OpenForms General [Batch Processing](#)
- Govern [Standard Feature](#)
- Govern Admin [GNA Batch Editor](#)
- Govern [Scheduler](#)

- Education

- Govern Administrator – Section 2 Installation

[PRODUCT] OpenForms

INSTALLATION

UPGRADE

RESOURCES

BATCH PROCESSING

OF REFERENCE

STANDARDS

SYSTEM REQUIREMENT

WHAT'S NEW | IMPACT

ASSMT

[WIKI] Harris | Product | PKO |  
Education | Service | Support |  
Employee | Sales | BPRB

[SYSTEM SERIES]

[OpenForms] Govern | GNA |  
BED | OFD | GSM | Scheduler  
[System Options] | [3rd Party] |  
[API/Services] | [Projects] | ...

# What's New

- Batch Process Definition will be kept in the Openforms Reference and available for distribution
- Archive Path
  - Input files will be copied here once processed with or without a date stamp

# Terms and Definitions

- **Batch Program:** Refers to standard or custom code developed in Govern to perform one or more actions for a selection of entries meeting predefined conditions (business rules) and/or user defined parameters.
- **Batch Process Name:** Identifies the method or class name executed in code when launched, stored in the VT System, Table Name = 'BATCH\_PROCESS' as a code
- **Batch Process Definition:** A batch process definition is used to setup the batch process options and execution parameters.
- **Audit Batch ID:** Once a batch process definition is launched, a batch audit ID sequence is assigned and errors, warnings and information is recorded for the batch ID in the Batch Audit Table
- **Batch ID:** When a batch process definition is created, it is assigned a batch id. Listed in the Batch Audit Result window and in the Import/Export EMT function.

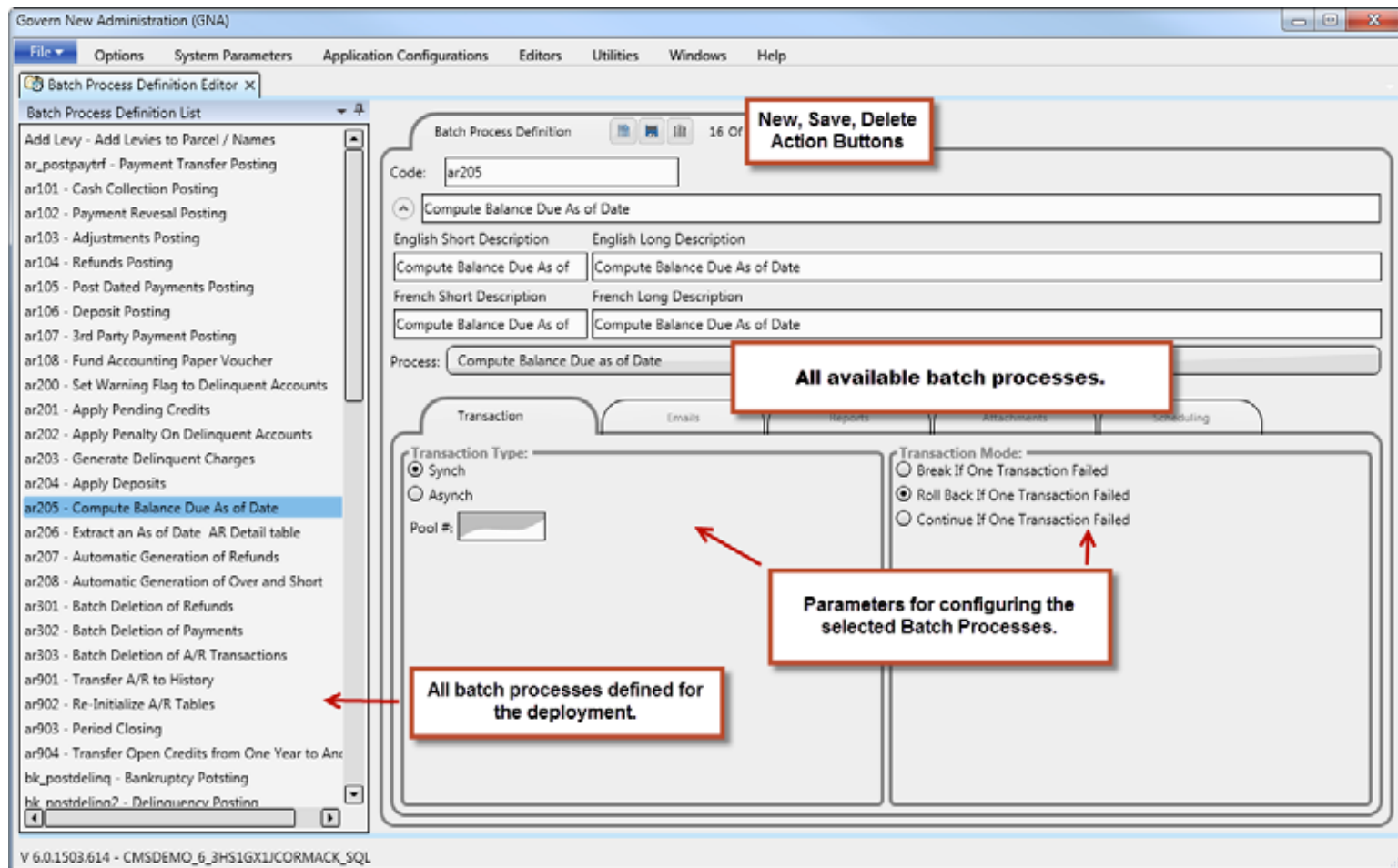
# Systems

- Systems:
  - [Govern](#) (Standard User Feature)
  - [Govern Administrator](#) (Batch Process Editor and Schedule Creation)
  - [Govern Scheduler](#)
  - Govern Batch (Execute OpenForms Batch program from Govern for Windows)

[What's New?](#)



# Govern Administrator



# Specifications

- Standard Features include:
  - [Execution](#) Mode/Type/Connection configuration
  - [Reporting](#)
  - [Email notification](#)
  - Scheduling (with Govern Scheduler)
  - [File Transfer and Attachments](#)
  - [What's new](#)

# Features - Attachments

- Attachements



The screenshot shows a software interface for defining a batch process. The window title is 'Batch Process Definition' and it shows '17 Of 18' steps. The 'Code' field is 'ZTestBatch'. A dropdown menu is set to 'Z Test Batch Process Email Notification'. The 'Process' field is 'Test Batch Process'. There are five tabs: 'Transaction', 'Emails', 'Reports', 'Attachments' (which is selected), and 'Scheduling'. Under the 'Attachments' tab, there are two main sections. The first section, 'Copy Attachments to Path', is checked and shows a 'Path' of '\\CZZ59Z1\govDEPLOY'. The second section, 'Copy Attachments to Ftp', is unchecked and contains fields for 'FTP Address', 'FTP Folder', 'User Name', 'Password', and 'Port' (set to 21). At the bottom, there is a checked checkbox for 'Add Time Stamp'.

Batch Process Definition 17 Of 18

Code: ZTestBatch

▼ Z Test Batch Process Email Notification

Process: Test Batch Process

Transaction Emails Reports Attachments Scheduling

☒ Copy Attachments to Path

Path: \\CZZ59Z1\govDEPLOY

☐ Copy Attachments to Ftp

FTP Address:

FTP Folder:

User Name:

Password:

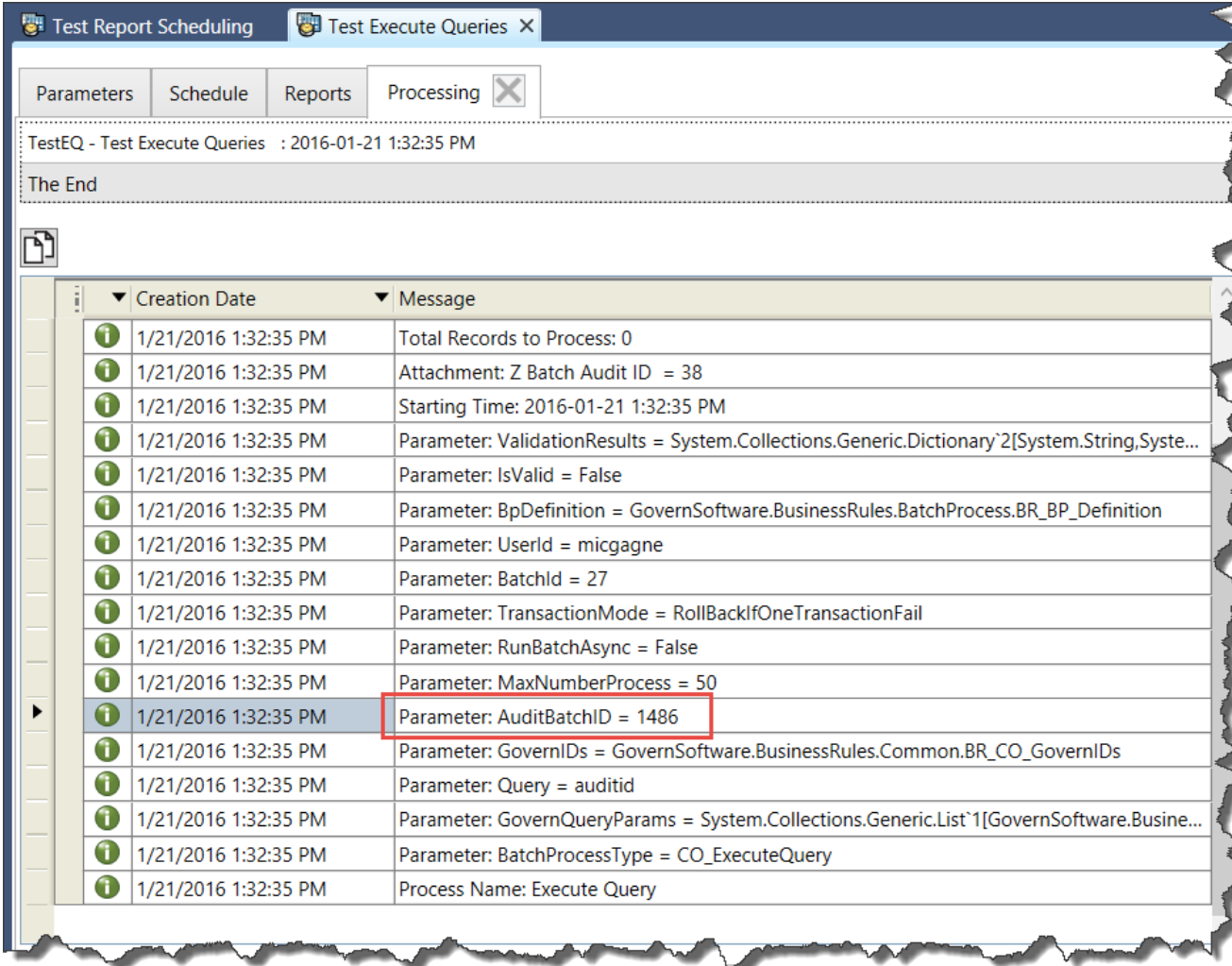
Port: 21

☒ Add Time Stamp

# Standard BPs

- Distributed Batch Processes include:
  - [Test Process](#) used to test batch processing and configuration parameters
  - [Execute Query Process](#) used to execute select and update queries
  - [Report Scheduler Process](#) used to execute a report schedule

# Features - Reporting



The screenshot displays the 'Test Report Scheduling' application window. The 'Test Execute Queries' tab is active, and the 'Processing' sub-tab is selected. The main area shows a log of messages for a test execution query named 'TestEQ - Test Execute Queries' on 2016-01-21 at 1:32:35 PM. The log starts with 'The End' and then lists a series of messages, each preceded by an information icon (i) and a timestamp of 1/21/2016 1:32:35 PM. The messages include parameters for validation, batch processing, and audit tracking. The message 'Parameter: AuditBatchID = 1486' is highlighted with a red box.

Creation Date	Message
1/21/2016 1:32:35 PM	Total Records to Process: 0
1/21/2016 1:32:35 PM	Attachment: Z Batch Audit ID = 38
1/21/2016 1:32:35 PM	Starting Time: 2016-01-21 1:32:35 PM
1/21/2016 1:32:35 PM	Parameter: ValidationResults = System.Collections.Generic.Dictionary`2[System.String,System...
1/21/2016 1:32:35 PM	Parameter: IsValid = False
1/21/2016 1:32:35 PM	Parameter: BpDefinition = GovernSoftware.BusinessRules.BatchProcess.BR_BP_Definition
1/21/2016 1:32:35 PM	Parameter: UserId = micgagne
1/21/2016 1:32:35 PM	Parameter: BatchId = 27
1/21/2016 1:32:35 PM	Parameter: TransactionMode = RollBackIfOneTransactionFail
1/21/2016 1:32:35 PM	Parameter: RunBatchAsync = False
1/21/2016 1:32:35 PM	Parameter: MaxNumberProcess = 50
1/21/2016 1:32:35 PM	Parameter: AuditBatchID = 1486
1/21/2016 1:32:35 PM	Parameter: GovernIDs = GovernSoftware.BusinessRules.Common.BR_CO_GovernIDs
1/21/2016 1:32:35 PM	Parameter: Query = auditid
1/21/2016 1:32:35 PM	Parameter: GovernQueryParams = System.Collections.Generic.List`1[GovernSoftware.Busine...
1/21/2016 1:32:35 PM	Parameter: BatchProcessType = CO_ExecuteQuery
1/21/2016 1:32:35 PM	Process Name: Execute Query

# Before Getting Started

- [System Requirement](#)
- Email Notifications
  - SMTP Server Information
  - SMTP Dummy Server for testing
- Port to use
- Batch Server Folder Path Security
  - Pc/Server on Domain & Folder accessible to all
- Archive Path (new) and Attachment Paths
- Server Name must be allowed to the shared location

General Connection Parameters

×

General

Minimum Connection Pool Size: 1

Maximum Connection Pool Size: 100

Minimum Cache Size: 50

Maximum Cache Size: 5000

Cache Refresh Rate: 300

Oracle

Increment Pool Size: 1

Decrement pool size: 3

Batch Parameters

Maximum Connection Pool Size: 1000

Connection Time Out (sec): 0

Web Parameters

Maximum Connection Pool Size: 100

Connection Time Out (sec): 30

Save

Exit

# GOVERN SCHEDULER

Step by Step Installation



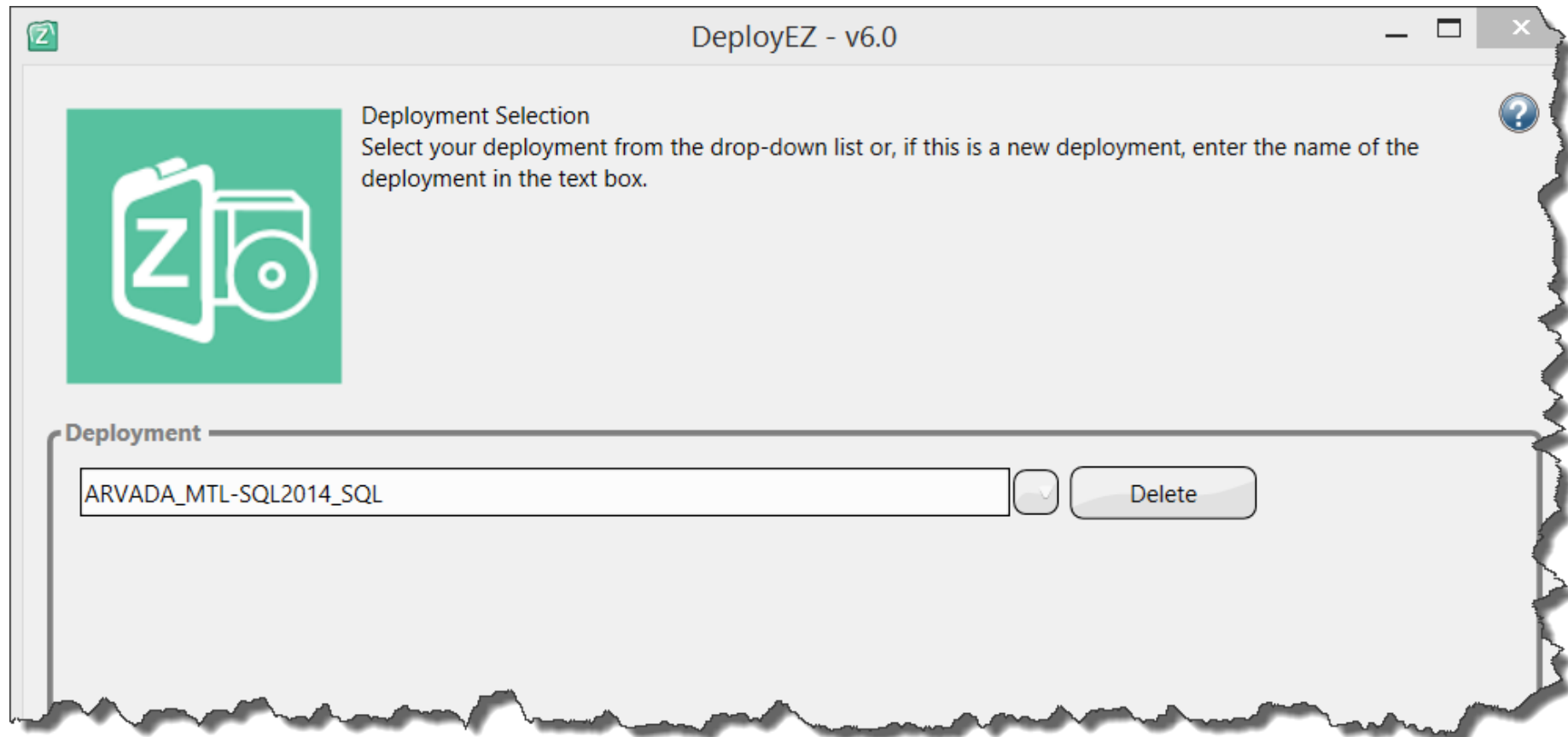
# Step 1 – Deploy

- On the source environment (connection key for which we want to have a scheduler batch service)
  - a) deploy the latest binaries
  - b) run a database verification
    - (standard practice after a deployment)

In the example that follows, we are setting up a Batch Scheduler Service for the following deployment:

[Arvada\\_MTL-SQL2014\\_SQL](#)

# DeployEZ

A screenshot of a software window titled "DeployEZ - v6.0". The window has a green icon in the top-left corner and standard window controls (minimize, maximize, close) in the top-right. The main content area is divided into two sections. The top section, titled "Deployment Selection", contains a green square icon with a white 'Z' and a CD symbol, and a text box with the instruction: "Select your deployment from the drop-down list or, if this is a new deployment, enter the name of the deployment in the text box." The bottom section, titled "Deployment", contains a text box with the text "ARVADA\_MTL-SQL2014\_SQL", a small dropdown arrow button, and a "Delete" button. The window has a torn paper effect on its right and bottom edges.

DeployEZ - v6.0

**Deployment Selection**

Select your deployment from the drop-down list or, if this is a new deployment, enter the name of the deployment in the text box.

**Deployment**

ARVADA\_MTL-SQL2014\_SQL

Delete

# Mandatory Deployment

- Binaries:
  - Resources
  - Custom Control
  - System Files
  - Govern Scheduler
- Services:
  - Govern Scheduler Service
  - Govern WCF Services
- Govern Install Pack

## Update ARVADAMTL-SQL2014\_SQL Deployment

Connection Key

ARVADA\_MTL-SQL2014\_SQL

☐ Select All / Unselect All

Filter

6.0.1511

☒ Resource Files

6.1.1601.0030

6.0.1511.0263

☒ System Files

6.0.1511.0263

6.0.1511.0263

☒ Govern Custom Control

6.0.1511.0263

6.0.1511.0263

☐ Govern

☐ Govern (V6)

6.0.1511.0263

☐ Govern New Admin (GNA)

6.0.1511.0263

☐ Govern Business Entity Designer (BED)

6.0.1511.0263

☐ Govern Model Designer (MOD)

☐ Govern Open Form Designer (OFD)

6.0.1511.0263

☐ Govern Security Manager (GSM)

6.0.1511.0263

☐ Govern Query Tool (QT)

6.0.1511.0263

☒ Govern Scheduler

6.0.1511.0263

6.0.1511.0263

☒ Govern Scheduler Service

6.0.1511.0263

6.0.1511.0263

☒ Govern WCF Services

6.0.1511.0263

6.0.1511.0263

☐ Govern Validator

6.0.1511.0263

# GOVERN SCHEDULER

Email Notifications

# Step 2- SMTP Server

OpenForms General Settings

Registry Filter: General

Drag a column header here to group by that column.

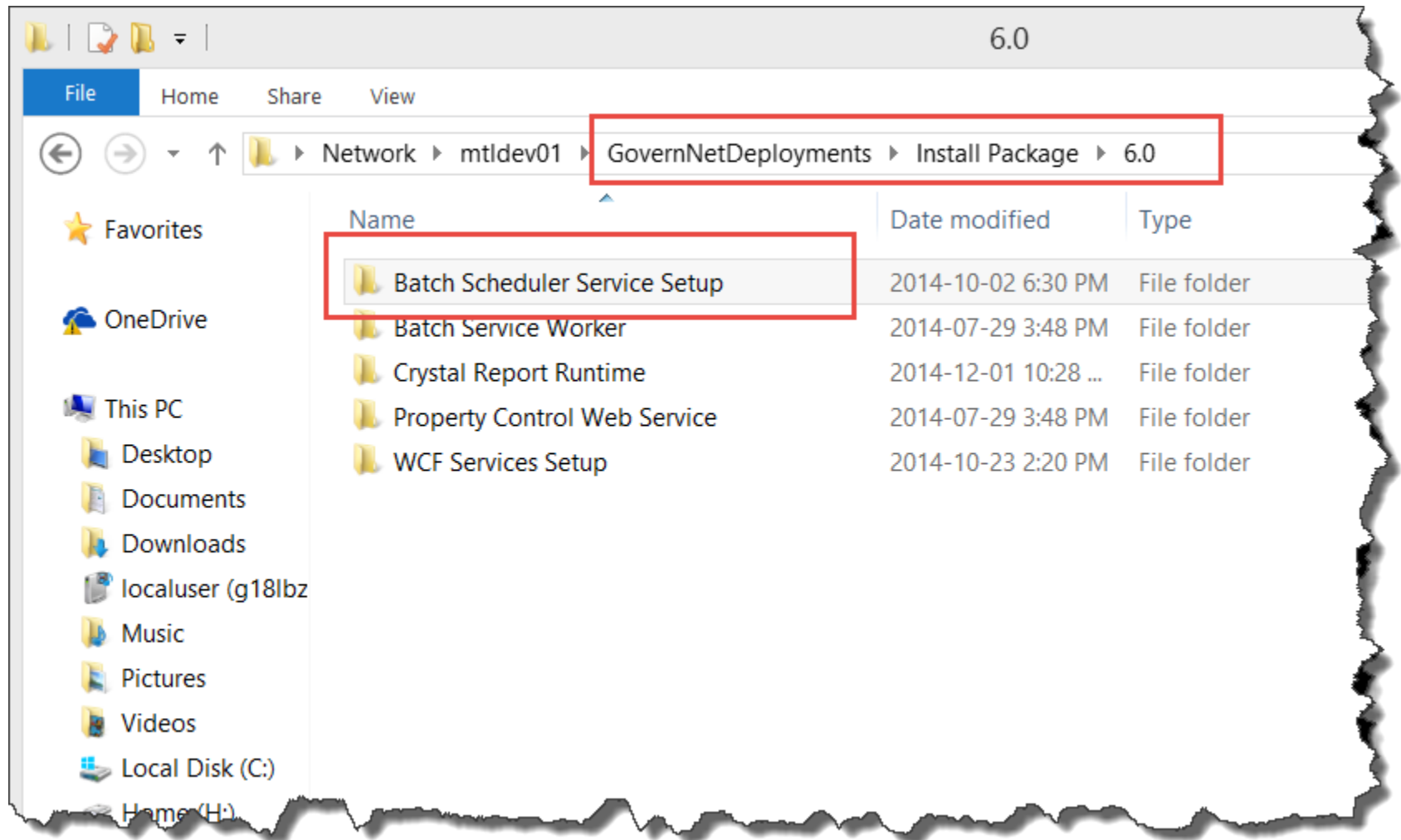
Section Name	Key Name	Year ID	Key Value
General	Customer Code		arv
General	Current Year for Winnipeg Satellite Systems		0
General	County		Value not set
General	Help Folder Structure Type		Same Level
Imaging	Imaging Path Level 3		\\fserver\ntwin\goverr
Imaging	Imaging Path Level 1		\\fserver\ntwin\goverr
Imaging	Imaging Path Level 2		\\fserver\ntwin\goverr
Roll Forward	Roll Forward Audit Records		<input checked="" type="checkbox"/>
SMTP	Port		6565
SMTP	Default Sender Address		donotreply@arvada.or
SMTP	Host		127.0.0.1
SMTP	Password		*****
SMTP	User		nouser

Save Exit

# GOVERN SCHEDULER

Install Batch Scheduler Service  
(BSS)

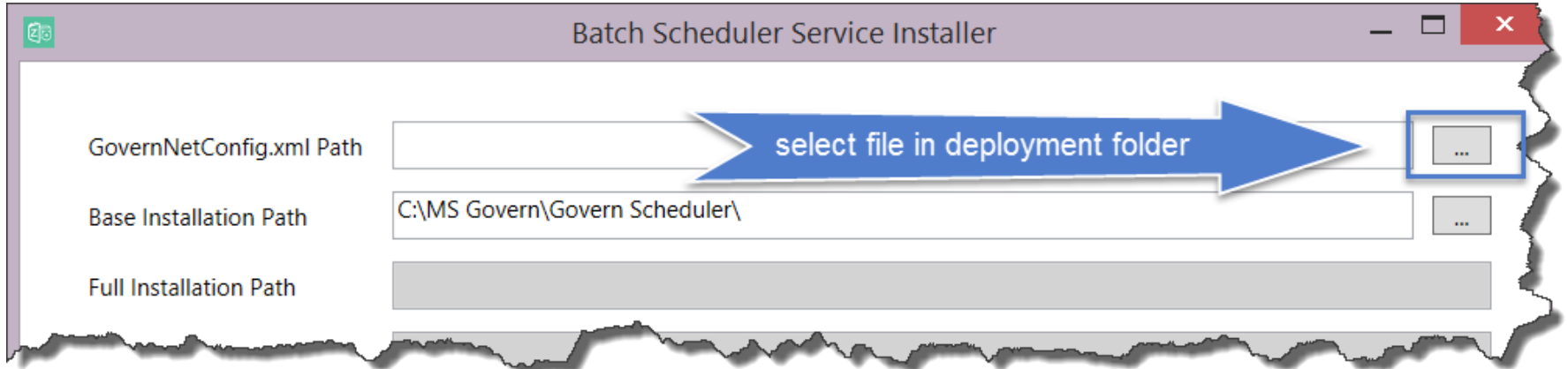
# Step 3 – Install BSS





# Execute Setup

- Download Install Package
- Log in to the server where you are setting up the Govern Scheduler application
- Double click on  
BatchSchedulerServiceSetup.exe



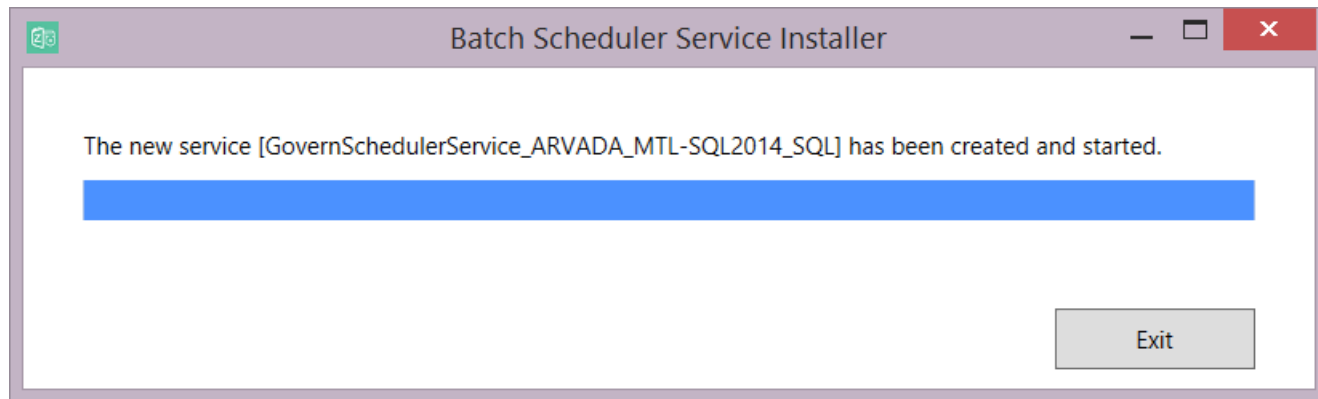


GovernNetConfig.xml Path	\\mtldev01\GovernNetDeployments\Deployments\ARVADA_MTL-SQL2014\GovernNetConfig.xml	...
Base Installation Path	C:\MS Govern\Govern Scheduler\	...
Full Installation Path	C:\MS Govern\Govern Scheduler\ARVADA_MTL-SQL2014	
Deployment Name	ARVADA_MTL-SQL2014	
Connection Key	ARVADA_MTL-SQL2014_SQL	
Service Name	GovernSchedulerService_ARVADA_MTL-SQL2014	

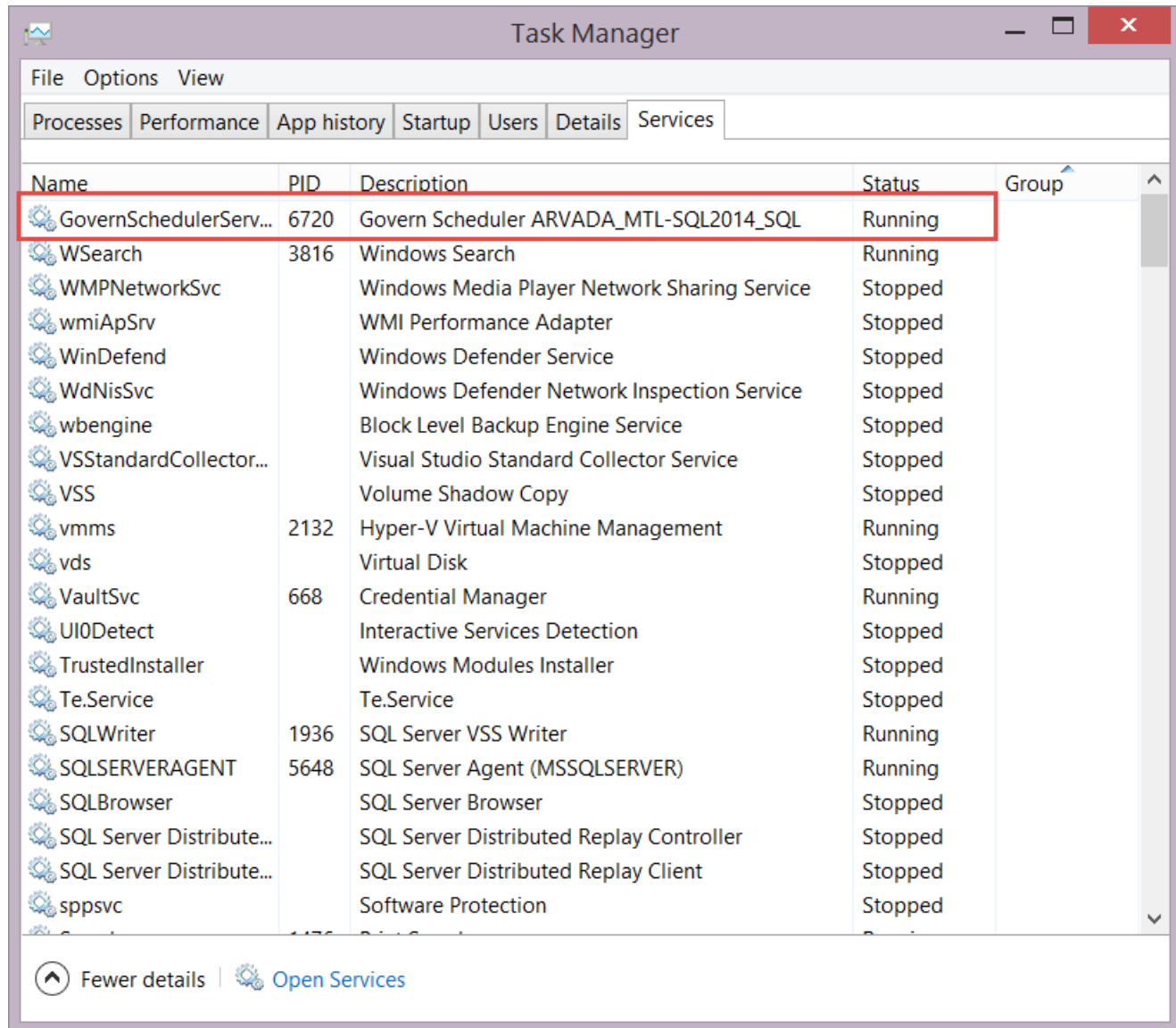
## Failure Alert Configuration

Email Addresses (separated by semicolon)	micgagne@harrisgovern.com; admin@harrisgovern.com
Smtp Server	127.0.0.1
Subject	Batch Processing Failed
Body	Email sent automatically because the batch service failed

- When Completed




# Task Manager - Services



The screenshot shows the Windows Task Manager application with the 'Services' tab selected. The window title is 'Task Manager'. The menu bar includes 'File', 'Options', and 'View'. The tab bar at the top shows 'Processes', 'Performance', 'App history', 'Startup', 'Users', 'Details', and 'Services'. The main area displays a list of services with columns for Name, PID, Description, Status, and Group. The service 'GovernSchedulerServ...' is highlighted with a red box. At the bottom, there are links for 'Fewer details' and 'Open Services'.

Name	PID	Description	Status	Group
GovernSchedulerServ...	6720	Govern Scheduler ARVADA_MTL-SQL2014_SQL	Running	
WSearch	3816	Windows Search	Running	
WMPNetworkSvc		Windows Media Player Network Sharing Service	Stopped	
wmiApSrv		WMI Performance Adapter	Stopped	
WinDefend		Windows Defender Service	Stopped	
WdNisSvc		Windows Defender Network Inspection Service	Stopped	
wbengine		Block Level Backup Engine Service	Stopped	
VSSStandardCollector...		Visual Studio Standard Collector Service	Stopped	
VSS		Volume Shadow Copy	Stopped	
vmms	2132	Hyper-V Virtual Machine Management	Running	
vds		Virtual Disk	Stopped	
VaultSvc	668	Credential Manager	Running	
UI0Detect		Interactive Services Detection	Stopped	
TrustedInstaller		Windows Modules Installer	Stopped	
Te.Service		Te.Service	Stopped	
SQLWriter	1936	SQL Server VSS Writer	Running	
SQLSERVERAGENT	5648	SQL Server Agent (MSSQLSERVER)	Running	
SQLBrowser		SQL Server Browser	Stopped	
SQL Server Distribute...		SQL Server Distributed Replay Controller	Stopped	
SQL Server Distribute...		SQL Server Distributed Replay Client	Stopped	
sppsvc		Software Protection	Stopped	

^ Fewer details |  Open Services

# Services More Details

Task Manager

File Options View

Processes Performance App history Startup Users Details **Services**

Name	PID	Description	Status	Group
fhsvc		File History Service	Stopped	LocalSystem...
FontCache	808	Windows Font Cache Service	Running	LocalService
FontCache3.0.0.0	644	Windows Presentation Foundation Font Cache 3.0....	Running	
GovernSchedulerService_ARVADA_MTL-SQL2014		Govern Scheduler ARVADA_MTL-SQL2014	Stopped	
gpsvc		Policy Client	Running	GPSSvcGroup
gupdate		Update Service (gupdate)	Stopped	
gupdatem		Update Service (gupdatem)	Stopped	
hidserv		Interface Device Service	Running	LocalSystem...
hkmsvc		Health Key and Certificate Management	Stopped	netsvcs
HomeGroupListener		HomeGroup Listener	Stopped	LocalSystem...

Start  
Stop  
Restart  
**Open Services**  
Search online  
Go to details

**Services (Local)**

**Govern Scheduler ARVADA\_MTL-SQL2014\_SQL**

[Stop](#) the service  
[Restart](#) the service

Description:  
Runs the Govern Scheduler. It also handles the scheduling and dispatching of the batch processes to the worker services. It generates error messages for failed processes if required.

Name	Description	Status	Startup Type	Log On As
File History Service	Protects user files from accidental loss by cop...		Manual (Trigger Start)	Local System
Function Discovery Provider Host	The FDPHOST service hosts the Function Disc...		Manual	Local Service
Function Discovery Resource Publication	Publishes this computer and resources attach...		Manual	Local Service
Google Update Service (gupdate)	Keeps your Google software up to date. If this ...		Automatic (Delayed ...	Local System
Google Update Service (gupdatem)	Keeps your Google software up to date. If this ...		Manual	Local System
<b>Govern Scheduler ARVADA_MTL-SQL2014_SQL</b>	Runs the Govern Scheduler. It also handles the...	Running	<b>Automatic</b>	Local System
Group Policy Client	The service is responsible for applying setting...		Automatic (Trigger S...	Local System
Health Key and Certificate Management	Provides X.509 certificate and key manageme...		Manual	Local System
HomeGroup Listener	Makes local computer changes associated wit...		Manual	Local System
HomeGroup Provider	Performs networking tasks associated with co...		Manual (Trigger Start)	Local Service
Human Interface Device Service	Activates and maintains the use of hot button...	Running	Manual (Trigger Start)	Local System
Hyper-V Data Exchange Service	Provides a mechanism to exchange data betw...		Manual (Trigger Start)	Local System

# Step 4 – SY REGISTER

OpenForms General Settings

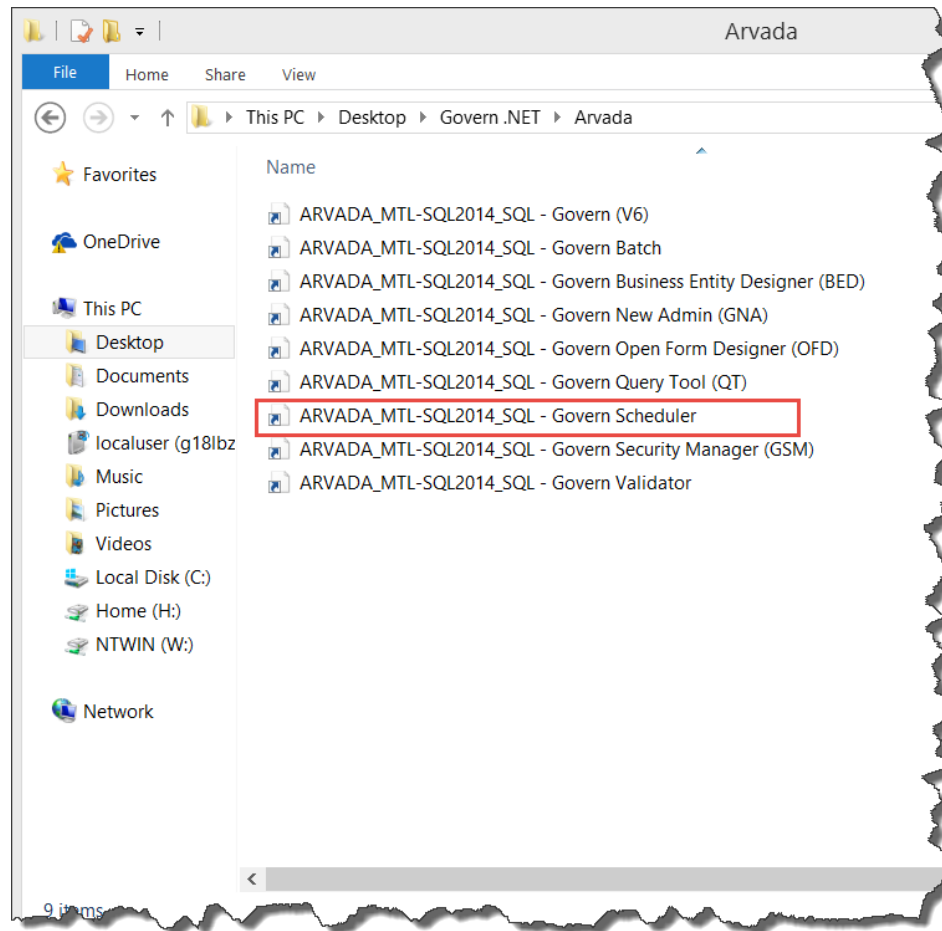
Registry Filter: Batch Process

Drag a column header here to group by that column.

Section Name	Key Name	Year ID	Key Value
Kenai : Import Collec...	Default A / R class for the Commission		Value not set
Kenai : Import Intere...	Default A / R class for the Interests		Value not set
Missing Filer (Self Re...	A/R Class Code for Delinquent Account		Value not set
Missing Filer (Self Re...	A/R Class Code for Notice		Value not set
Missing Filer (Self Re...	Interval Between Event History		0
Scheduler	Minimum Batch Process Interval For Update (Minute)		15
Scheduler	Scheduler Service Machine Name		czz59z1
Scheduler	Scheduler Service Port Number		3333
TOH: Lockbox	Lockbox: General Reject Date (mm/dd)		08/31
TOH: Lockbox	Lockbox: School Reject Date (mm/dd)		05/31
TOH: Vitesse Bill	Corrected Bill Dept List		BS
TOH: Vitesse Bill	Corrected Bill Kind List		workflow
TOH: Vitesse Bill	Watermark List		Value not set

Save Exit

# Install Govern Scheduler







Govern Scheduler

Drag a column header here to group by that column.

Name	Frequency	Last State	Next Run	Owner
------	-----------	------------	----------	-------

☐ Include expired and disabled schedules

History

Logs

Drag a column header here to group by that column.

Start Date	Last Date
------------	-----------

Details

Drag a column header here to group by that column.

 Event Date	Type	Message
---	------	---------

Services

Drag a column header here to group by that column.

Deployment Name	Name	Status
ARVADA_MTL-SQL2...	Govern Scheduler ARVADA_MTL-SQL2014_SQL	Running

StartStop

History

Drag a column header here to group by that column.

Date
 2016-01-14 7:25 PM

Service started successfully.

Showing history from: 1/11/2016 8:07:00 PM Load More

# Testing

Batch Process Definition Editor X

Batch Process Definition 0 Of 13

Code: TestBP

Test Batch Service

Process: Test Batch Process

Transaction Emails Reports Attachments

**Transaction Type:**

- ☒ Synch
- ☐ Asynch

Pool #:

**Transaction Mode:**

- ☐ Break If One Transaction Failed
- ☒ Roll Back If One Transaction Failed
- ☐ Continue If One Transaction Failed



# Email

Code: TestBP

Test Batch Service

Process: Test Batch Process

Transaction

Emails

Reports

Attachments

Scheduling

☒ Send email on batch completion

Subject: Batch Completed

The Test Batch Process has completed

Message:

Sender: donotreply@arvada.org

☒ Send a copy of email to sender☒ Include attachments in email

Available:

Aurelia Pitic  
Benoit Lauzon  
Bill Koperski  
Bonnie Brown-Holmes  
Cyril Viron  
Daniel Vendette  
Daniela Andrei  
Eric Martineau  
Eric Plante  
Fabrice Olivier  
George Mirea  
Hernan Alonso  
Jane Cormack




Recipients:

Michelle Gagne

Recipients (if errors arise):

Michelle Gagne






# Report

Batch Process Definition    14 Of 14

Code:

▼ Test Batch Service

Process:

Transaction   Emails   **Reports**      Attachments   Scheduling  

Description	Format Type
BatchStat.rpt	PDF

TestBP - Test Batch Service

Parameters

Schedule

Reports

Name:

Test Batch Scheduling

Description:

This process is to test the Batch Service and Scheduling

Scheduled process:

TestBP - Test Batch Service

☒ Activated

Owner:

Michelle Gagne (micgagne)

Settings

☒ One time

Start Date: 1/14/2016 9:00 PM



English ?

Batch Processes Services on CZZ59Z1

Govern Scheduler

Drag a column header here to group by that column.

Name	Frequency	Last State	Next Run	Owner	Progress
Test Batch Scheduling	One time	Attachment	2016-01-14 9:00 PM	micgagne	<div></div>

☐ Include expired and disabled schedules

Delete

History

Logs

Drag a column header here to group by that column.

Start Date	Last Date
2016-01-14 9:00 PM	2016-01-14 9:00 PM

Details

Drag a column header here to group by that column.

Event Date	Type	Message
2016-01-14 9:00 PM	Error	Error generating report. Report ID: Batch
2016-01-14 9:00 PM	Status Changed	Generating CSV File
2016-01-14 9:00 PM	Attachment	Attachment id: 1, Description: Batch Pro
2016-01-14 9:00 PM	Batch end	

Showing history from: 1/7/2016 8:39:26 PM

Load More

## Govern Scheduler

English



Batch Processes Services on CZZ59Z1

### Govern Scheduler

Drag a column header here to group by that column.

Name	Frequency	Last State	Next Run	Owner	Progress
Test Batch Scheduling	One time			micgagne	
Test Batch Process	One time		2016-01-14 9:15 PM	micgagne	

☐ Include expired and disabled schedules

Delete

Schedule

### History




Logs

Details



# Report Scheduler

Batch Process Definition

 15 Of 15

Code:

▼

 Test Report Scheduling

Process:

Transaction

Emails

Reports

Attachments

Scheduling

☐ Only allow One Time schedules

Name	Frequency	Owner
------	-----------	-------

# Execute Query

Batch Process Definition

15 Of 16

Code:

▼

Test Execute Queries

Process:

Transaction

Emails

Reports

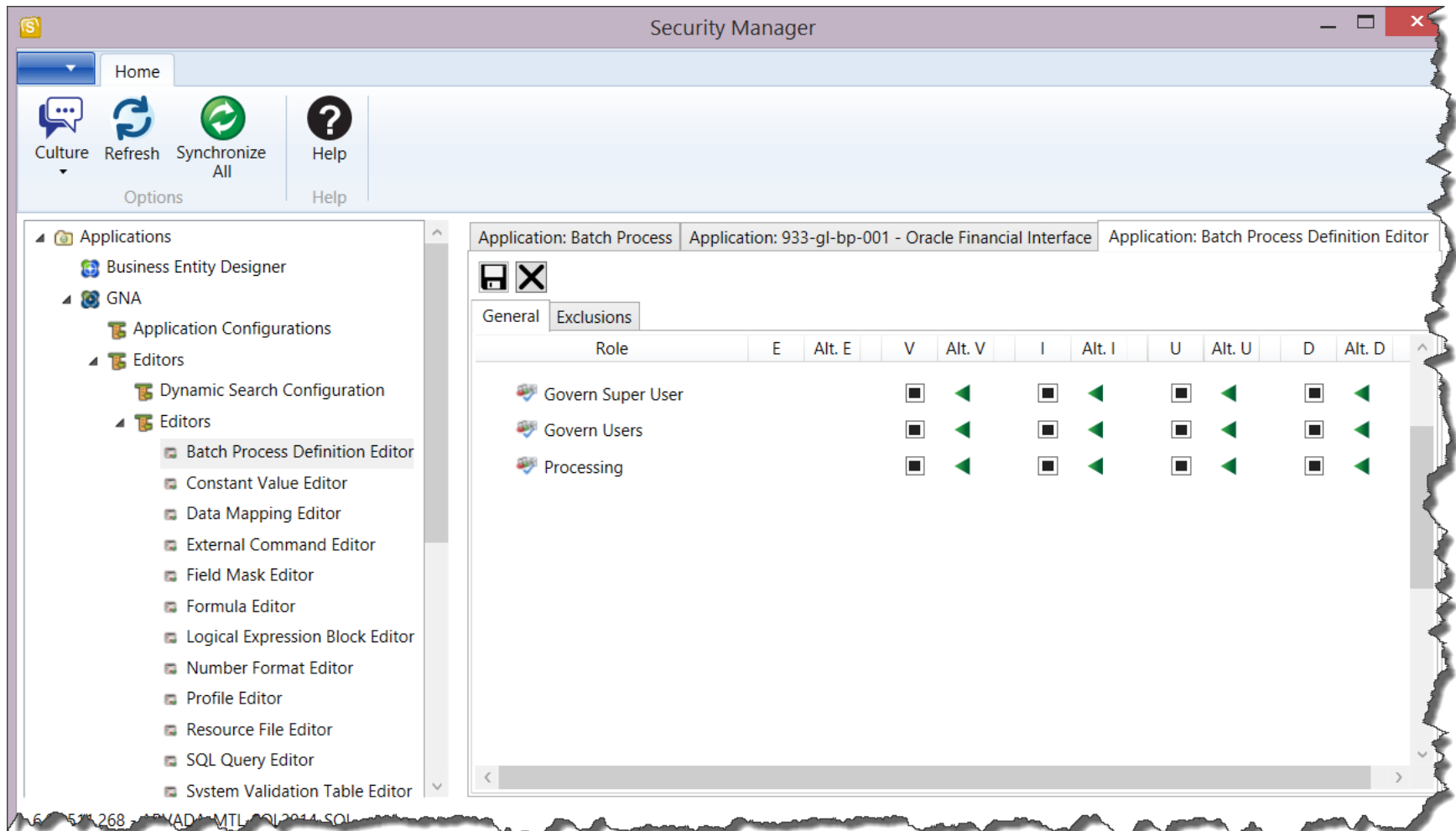
Attachments

Scheduling

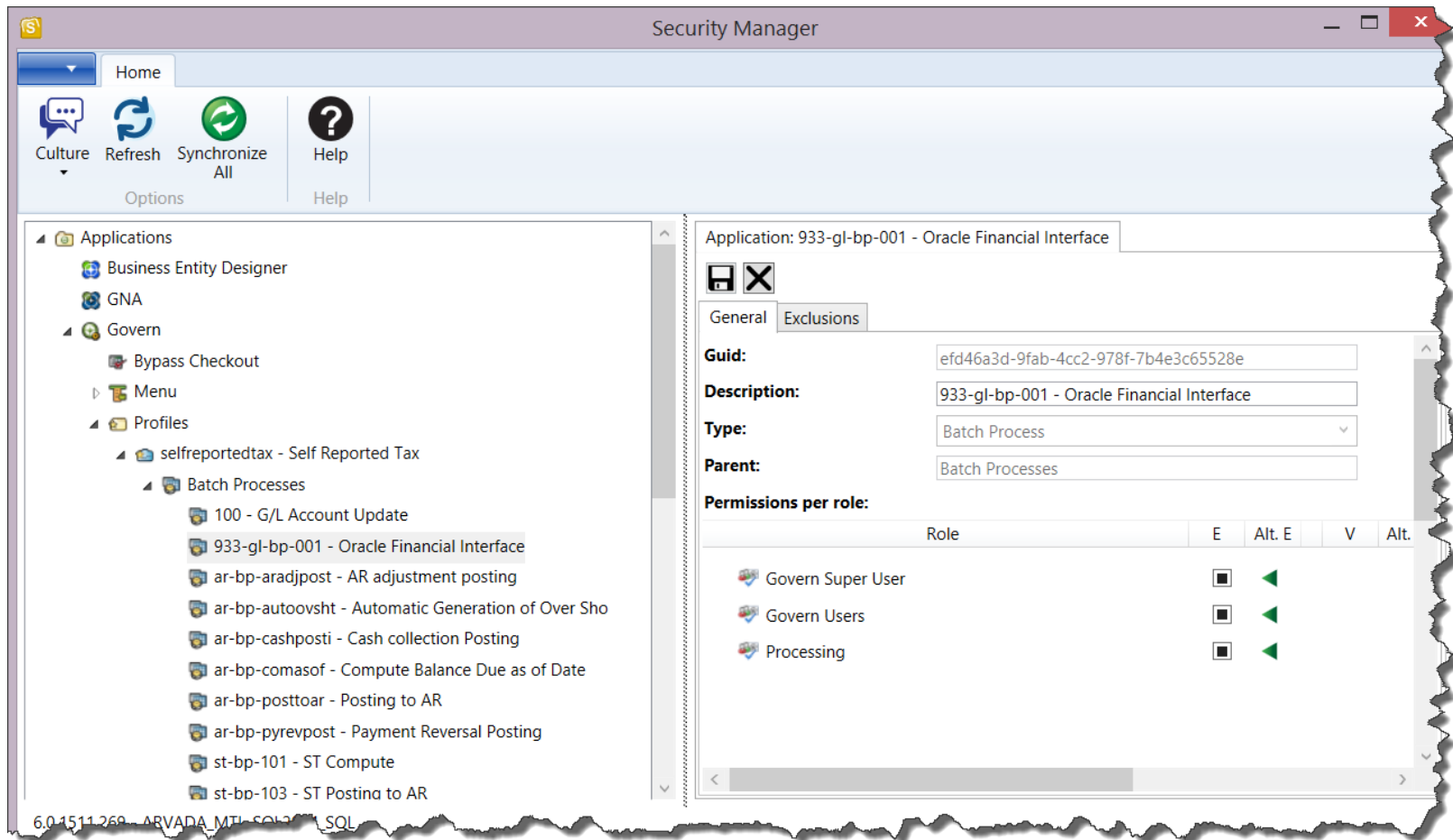
☐ Only allow One Time schedules

Name	Frequency	Owner
------	-----------	-------

# Step 7 – Security GNA Editor





# Profile Batch Process



# Step 7 - Security

Application: Batch Process

Application: 933-gl-bp-001 - Oracle Financial Interface



General Exclusions

**Guid:**

efd46a3d-9fab-4cc2-978f-7b4e3c65528e

**Description:**

933-gl-bp-001 - Oracle Financial Interface


**Type:**


Batch Process


**Parent:**

Batch Processes

**Permissions per role:**



 Govern Super User

 Govern User



 Processing

Application: Batch Process

Application: 933-gl-bp-001 - Oracle Financial Interface



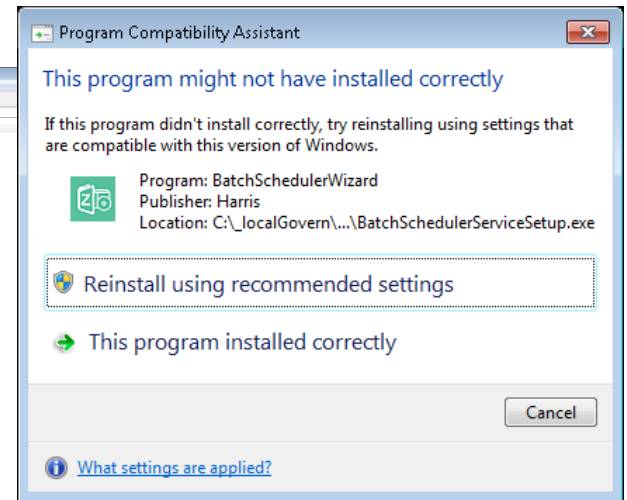
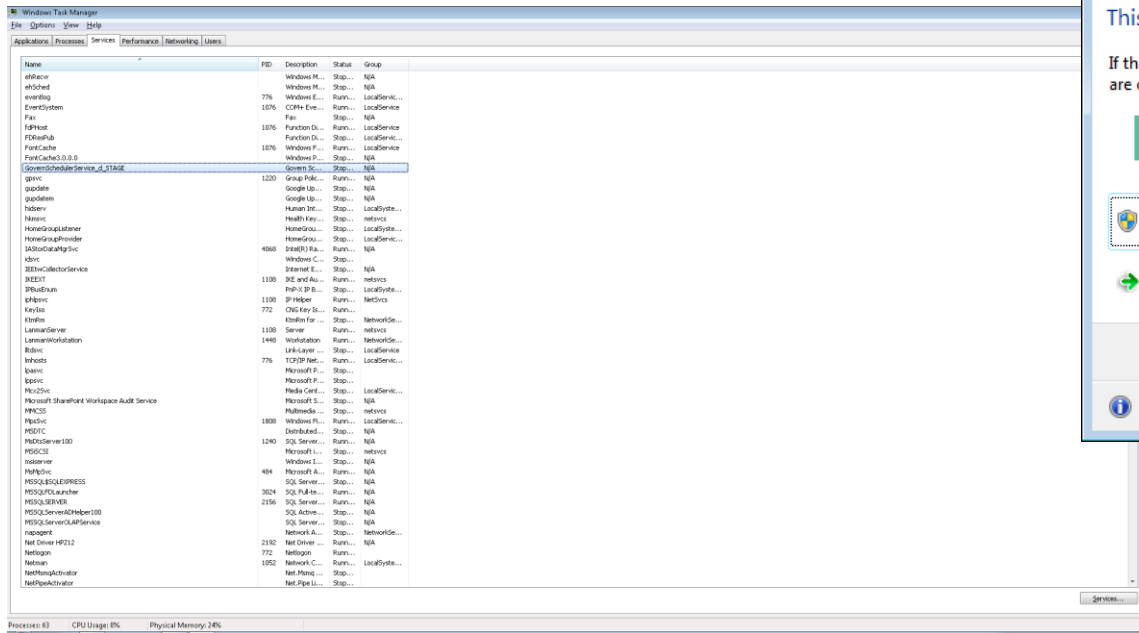
General Exclusions

User	E	Alt. E	V	Alt
 Michelle Gagne	<input type="checkbox"/>			

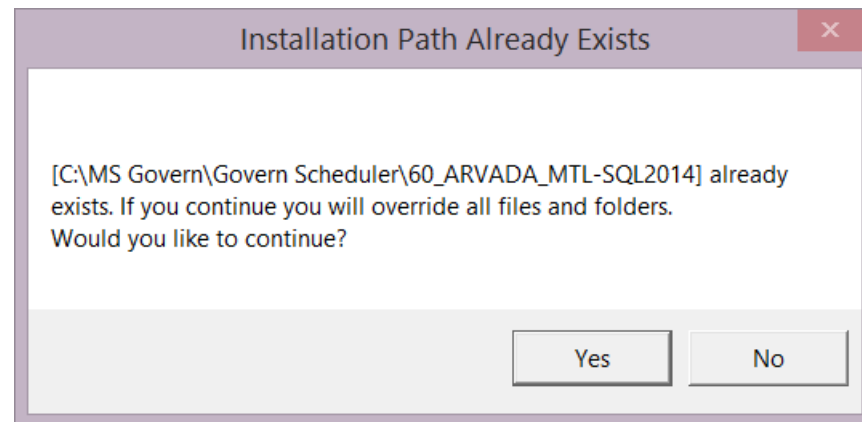
# Install problem

- After install, if you service has failed to start, you get this message.

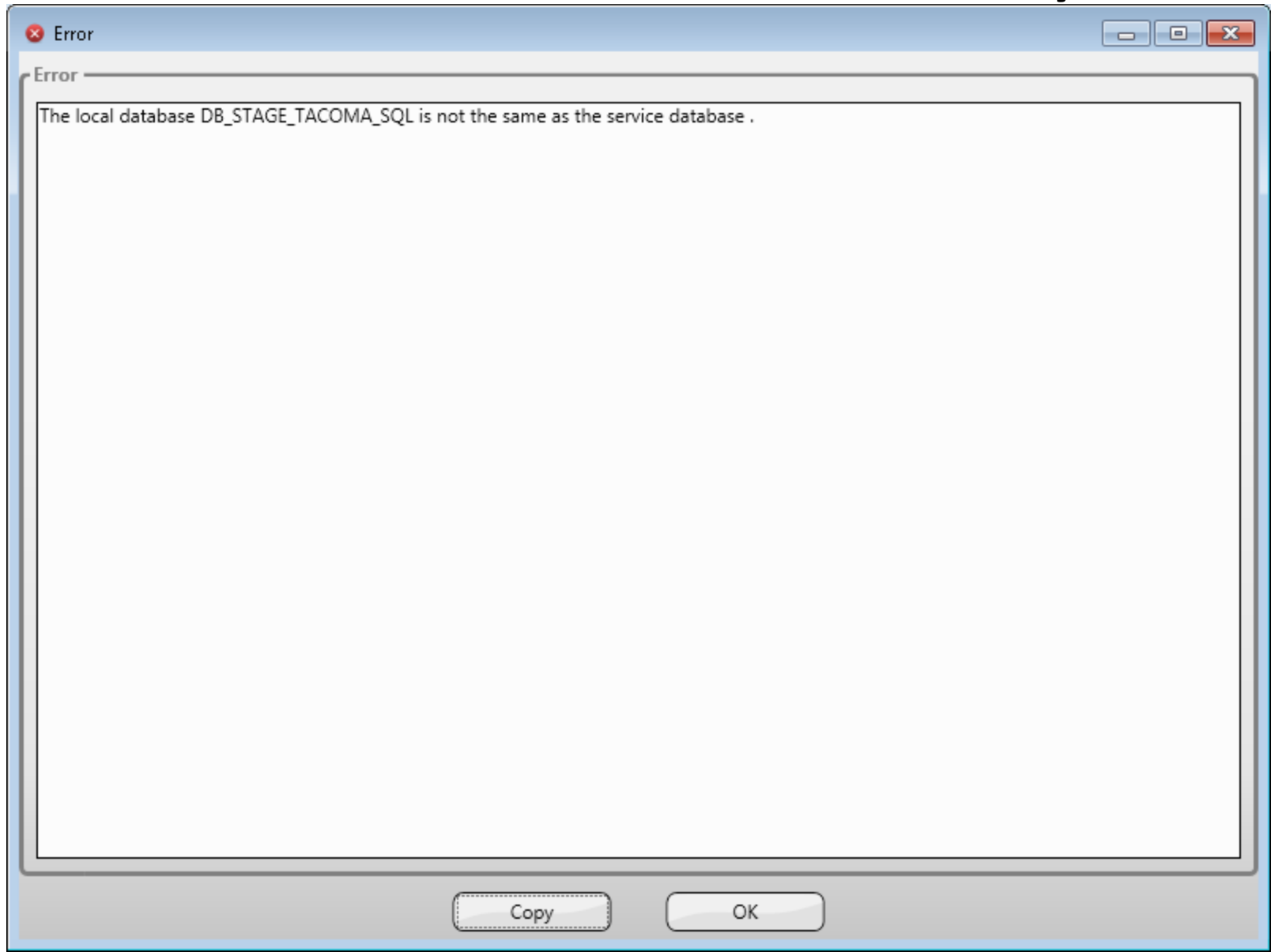
## Service is installed but not started



# Installation Path already exists



# Different Connection Key





# Service Stopped

Services (Local)

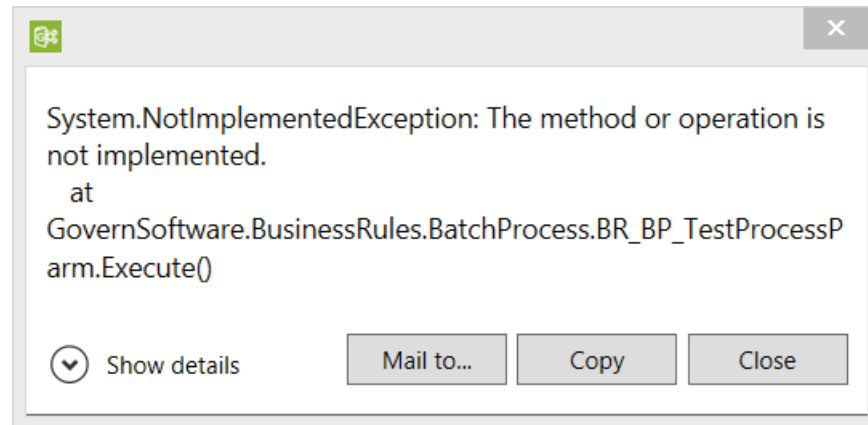
**Govern Scheduler ARVADA\_MTL-SQL2014\_SQL**

[Stop](#) the service  
[Restart](#) the service

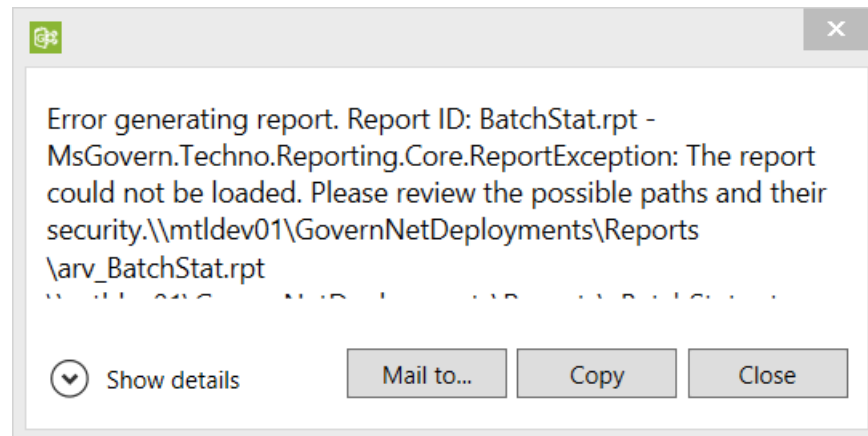
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Function Discovery Provider Host	The FDPHOST service hosts the Function Disc...		Manual	Local Service
Function Discovery Resource Publication	Publishes this computer and resources attach...		Manual	Local Service
Google Update Service (gupdate)	Keeps your Google software up to date. If this ...		Automatic (Delayed ...	Local System
Google Update Service (gupdate)	Keeps your Google software up to date. If this ...		Manual	Local System
<b>Govern Scheduler ARVADA_MTL-SQL2014_SQL</b>	Runs the Govern Scheduler. It also handles the...	Running	<b>Automatic</b>	Local System
Group Policy Client	The service is responsible for applying setting...		Automatic (Trigger S...	Local System
Health Key and Certificate Management	Provides X.509 certificate and key managemen...		Manual	Local System
HomeGroup Listener	Makes local computer changes associated wit...		Manual	Local System
HomeGroup Provider	Performs networking tasks associated with co...		Manual (Trigger Start)	Local Service
Human Interface Device Service	Activates and maintains the use of hot button...	Running	Manual (Trigger Start)	Local System
Hyper-V Data Exchange Service	Provides a mechanism to exchange data betw...		Manual (Trigger Start)	Local System

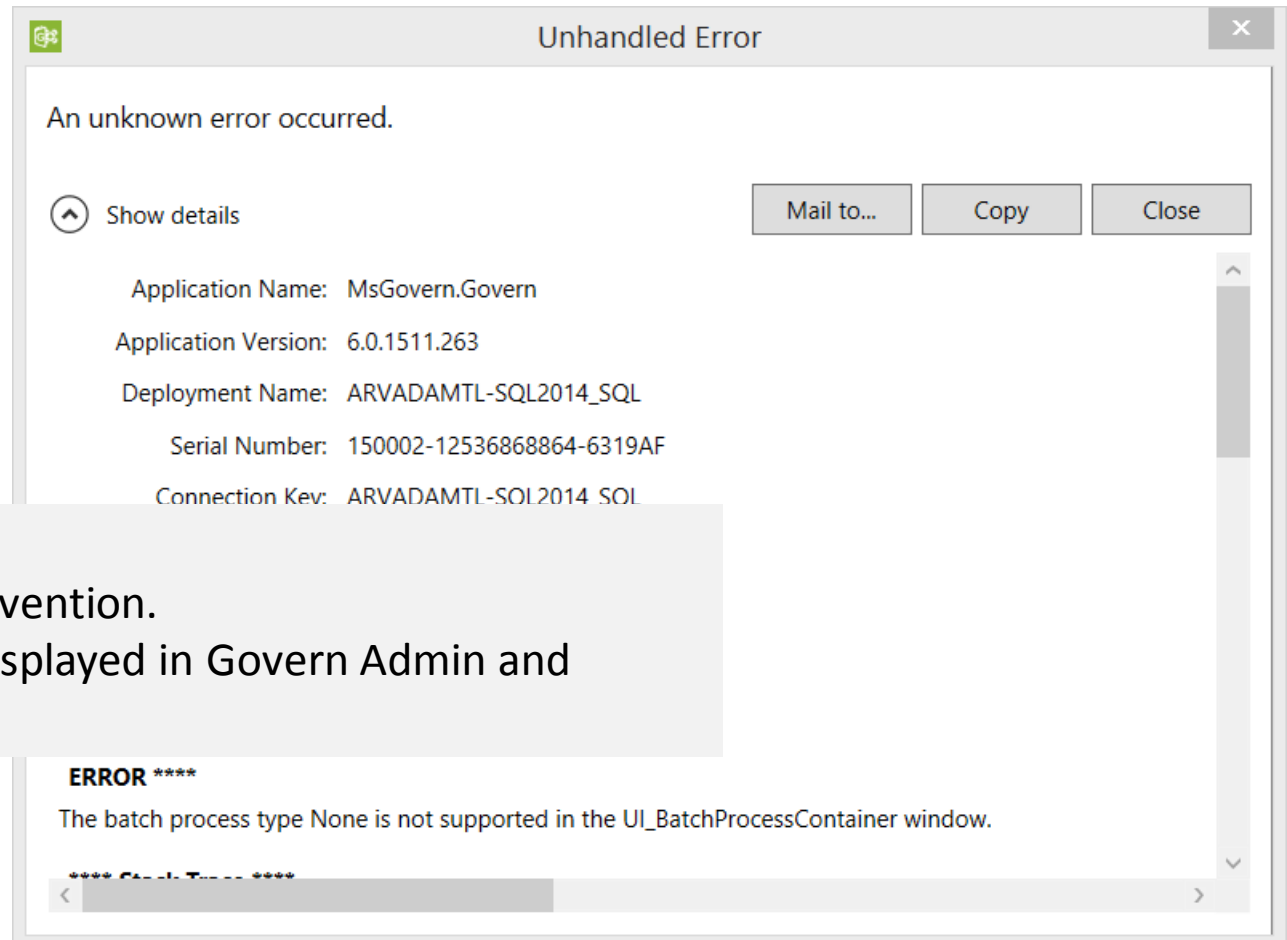
- Method not implemented



- Report problems



- Older Batch Program



**IMPORTANT:**

Needs programmer intervention.

The same error will be displayed in Govern Admin and Govern






















# Removing a Service

- Command Prompt as ADMIN
- Sc delete [service name]
- Service Name (Verify Services Properties)

## Task Manager

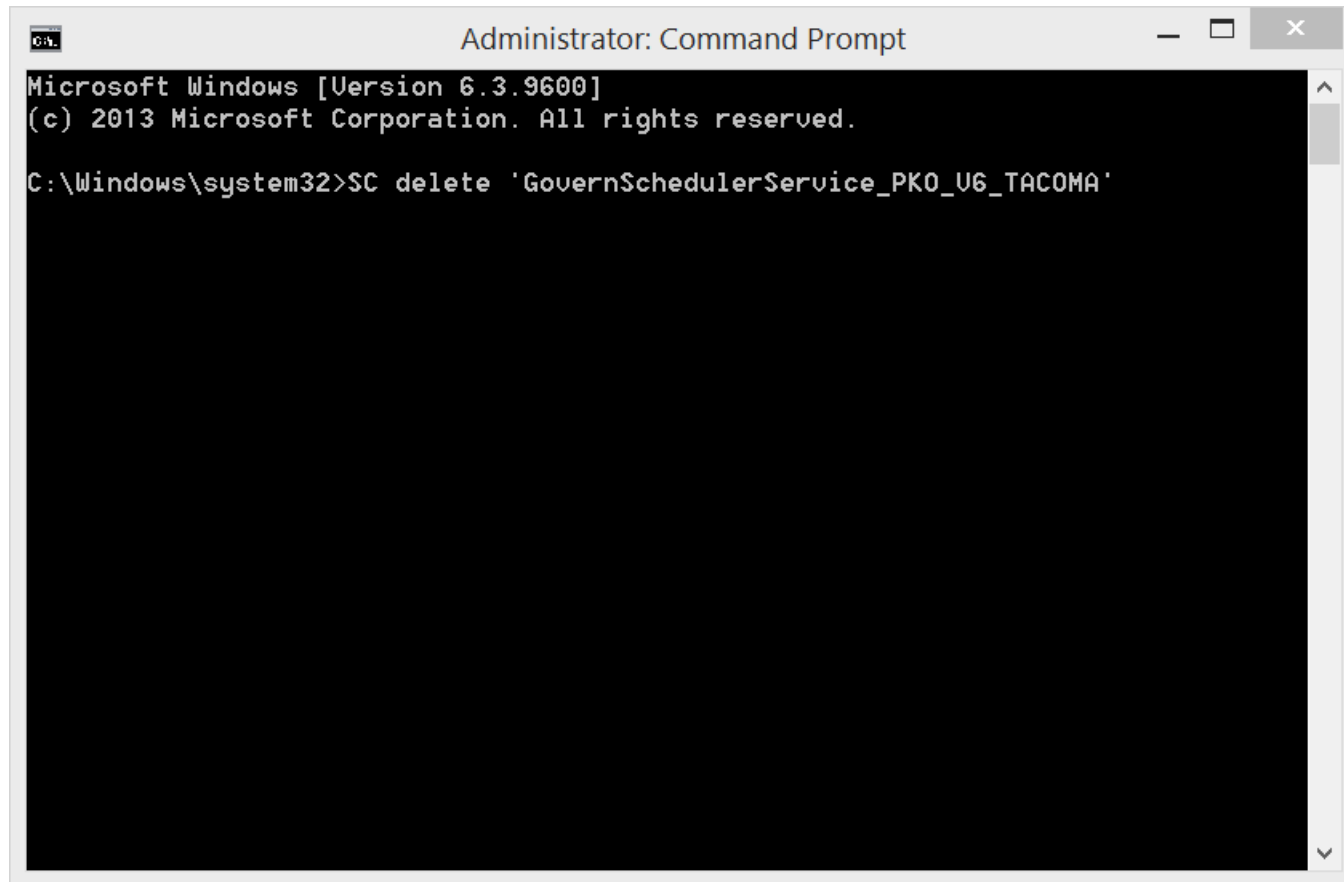
File Options View

Processes Performance App history Startup Users Details Services

Name	PID	Description
 Fax		Fax
 fdPHost	752	Function Discovery Provider Host
 FDResPub		Function Discovery Resource Publication
 fhsvc		File History Service
 FontCache	752	Windows Font Cache Service
 FontCache3.0.0.0	3980	Windows Presentation Foundation Font Cache 3
 GovernSchedulerService_ARVADA_MTI-SOI 2014 SOI	6720	Govern Scheduler ARVADA_MTI-SOI 2014 SOI
 GovernSchedulerService_PKO_V6_TACOMA		Govern Scheduler PKO_V6_TACOMA
 gpsvc	184...	Group Policy Client
 gupdate		Google Update Service (gupdate)
 gupdatem		Google Update Service (gupdatem)
 hidserv	1076	Human Interface Device Service
 hkmsvc		Health Key and Certificate Management
 HomeGroupListener		HomeGroup Listener
 HomeGroupProvider		HomeGroup Provider
 IASTorDataMgrSvc	1192	Intel(R) Rapid Storage Technology
 IEEtwCollectorService		Internet Explorer ETW Collector Service
 igfxCUIService1.0.0.0	928	Intel(R) HD Graphics Control Panel Service
 IKEEXT	592	IKE and AuthIP IPsec Keying Modules
 Intel(R) Capability Licensing Service Interface	1780	Intel(R) Capability Licensing Service Interface
 Intel(R) Capability Licensing Service TCP/IP Interface		Intel(R) Capability Licensing Service TCP/IP Interface

 Fewer details |  Open Services

# Run as Administrator

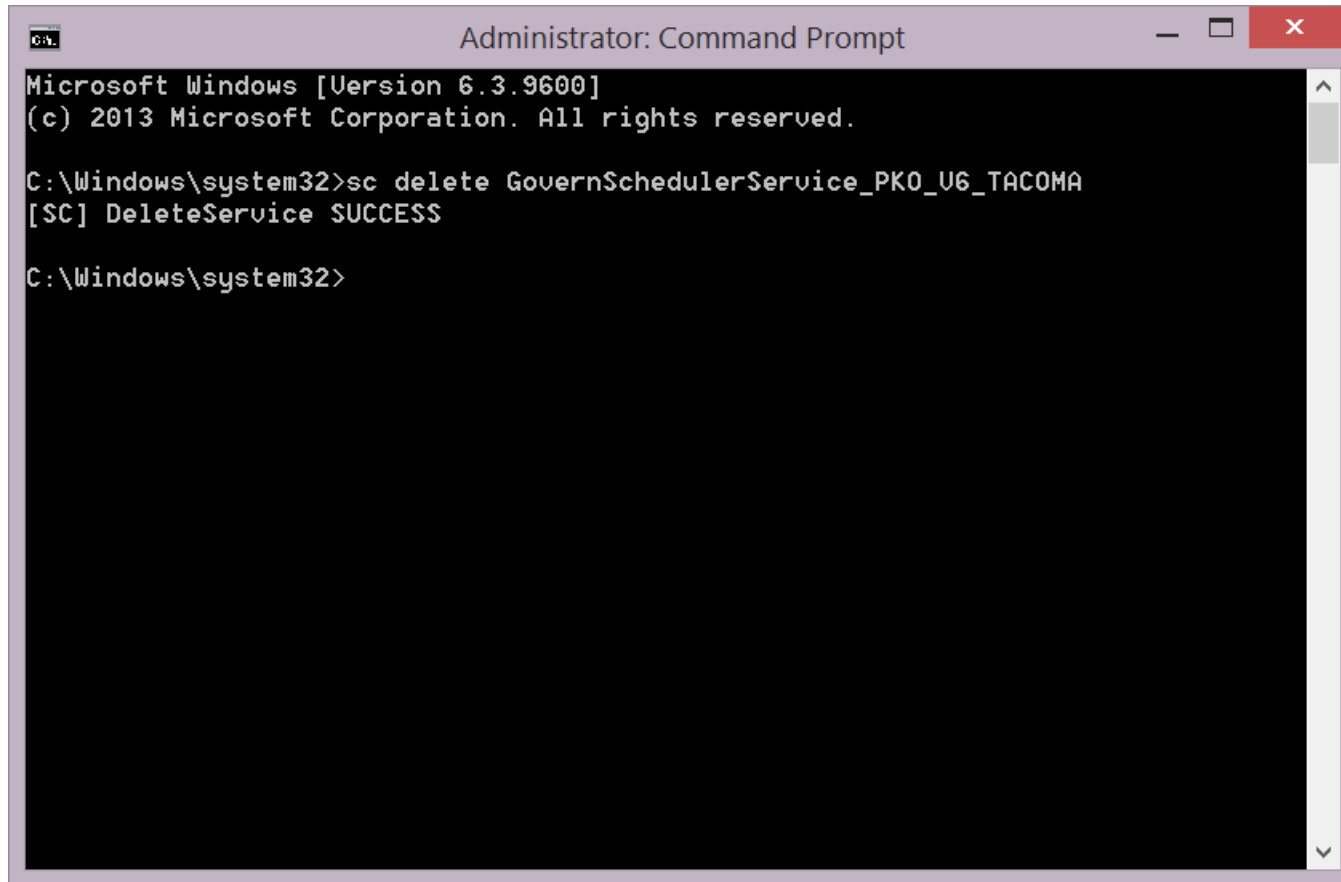


A screenshot of a Windows Command Prompt window titled "Administrator: Command Prompt". The window has a standard Windows title bar with minimize, maximize, and close buttons. The command prompt shows the following text:

```
Microsoft Windows [Version 6.3.9600]  
(c) 2013 Microsoft Corporation. All rights reserved.  
  
C:\Windows\system32>SC delete 'GovernSchedulerService_PK0_U6_TACOMA'
```

The command prompt is running in the C:\Windows\system32 directory. The command being executed is `SC delete 'GovernSchedulerService_PK0_U6_TACOMA'`. The window has a vertical scrollbar on the right side.

# SUCCESS



The image shows a screenshot of a Windows Command Prompt window titled "Administrator: Command Prompt". The window has a standard Windows title bar with minimize, maximize, and close buttons. The command prompt displays the following text:

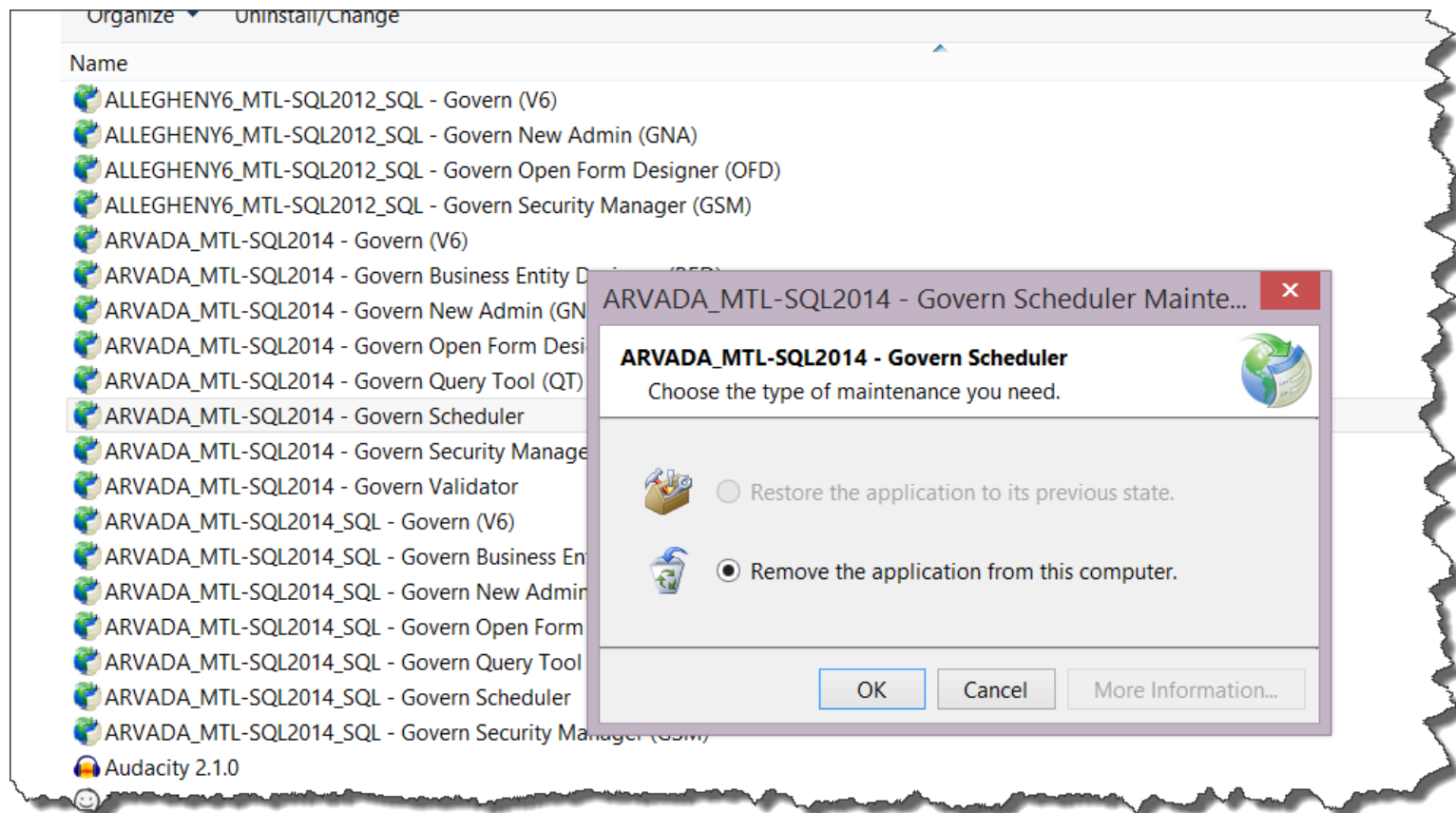
```
Microsoft Windows [Version 6.3.9600]  
(c) 2013 Microsoft Corporation. All rights reserved.  
  
C:\Windows\system32>sc delete GovernSchedulerService_PK0_U6_TACOMA  
[SC] DeleteService SUCCESS  
  
C:\Windows\system32>
```

The text is displayed in a white font on a black background. The command prompt shows the execution of the command `sc delete GovernSchedulerService_PK0_U6_TACOMA`, which resulted in the output `[SC] DeleteService SUCCESS`. The prompt is currently at `C:\Windows\system32>`.



# Remove Apps (Control Panel)

- Clean-up in Control Panel





# SMTP for Dev

Installation and setup of SMTP4Dev

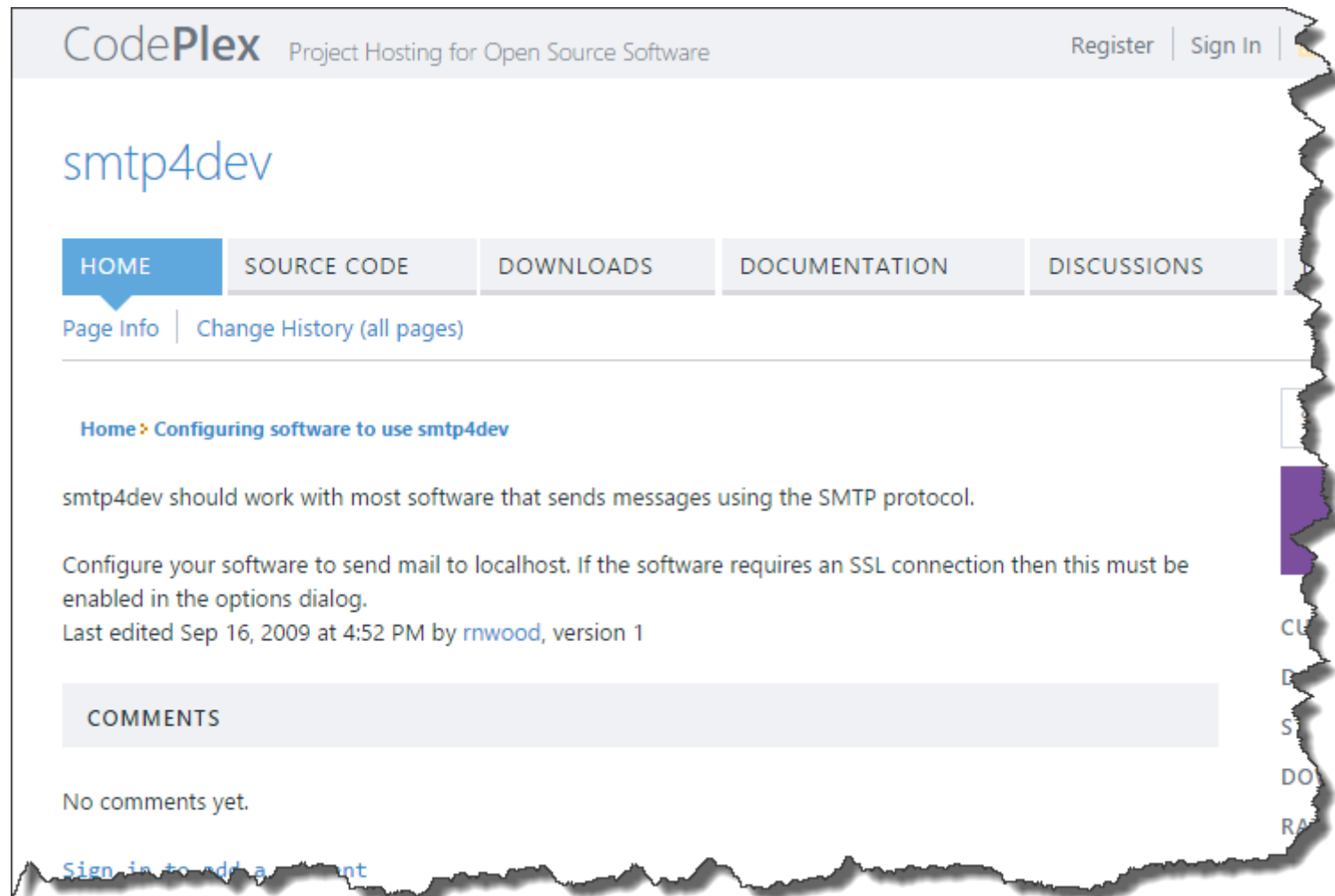
100-install-SMTP4Dev

# Installing SMTP4Dev

- For testing purposes, you can install SMTP4Dev, a dummy SMTP server that sits in the system tray so that the messages are not delivered via the regular server.

This Open Source Software is distributed by Code Plex.

# www.smtp4dev.codeplex.com



The screenshot shows the CodePlex website interface for the smtp4dev project. The top header includes the CodePlex logo and the tagline 'Project Hosting for Open Source Software', along with links for 'Register' and 'Sign In'. The project name 'smtp4dev' is prominently displayed. A navigation bar contains links for 'HOME', 'SOURCE CODE', 'DOWNLOADS', 'DOCUMENTATION', and 'DISCUSSIONS', with 'HOME' being the active selection. Below the navigation bar, there are links for 'Page Info' and 'Change History (all pages)'. The main content area features a breadcrumb trail 'Home > Configuring software to use smtp4dev'. The text explains that smtp4dev works with most software using the SMTP protocol and provides instructions on configuring it to send mail to localhost, including a note about SSL connections. It also states the last edit date and author. A 'COMMENTS' section is present but empty, with a prompt to 'Sign in to add a comment'. On the right side, a vertical sidebar contains a purple button and a list of links: 'CL', 'E', 'S', 'DO', and 'RA'.

CodePlex Project Hosting for Open Source Software Register Sign In

## smtp4dev

HOME SOURCE CODE DOWNLOADS DOCUMENTATION DISCUSSIONS

Page Info | Change History (all pages)

Home > Configuring software to use smtp4dev

smtp4dev should work with most software that sends messages using the SMTP protocol.

Configure your software to send mail to localhost. If the software requires an SSL connection then this must be enabled in the options dialog.

Last edited Sep 16, 2009 at 4:52 PM by [rnwood](#), version 1

### COMMENTS

No comments yet.

[Sign in to add a comment](#)

CL  
E  
S  
DO  
RA

# Setup SMTP4Dev

The screenshot shows the 'Options' dialog box for SMTP4Dev, with the 'Server' tab selected. A red rectangle highlights the 'Listen Interface' dropdown menu, which is set to '127.0.0.1', and the 'Port number' spinner, which is set to '6565'. Other settings include 'Domain Name' as 'localhost', 'Extensions' with 'Implicit SSL/TLS' unchecked and others checked, and 'Max Message Size' as '0'.

Options

User Interface Server Updates

Domain Name: localhost

Listen Interface (0.0.0.0 = ALL): 127.0.0.1

Port number: 6565

Extensions:

- ☐ Implicit SSL/TLS
- ☒ 8BITMIME (Don't corrupt non ASCII data)
- ☒ STARTTLS (Explicit SSL/TLS)
- ☒ AUTH (Allow authentication - any credentials accepted)
- ☒ SIZE (Allow client to specify message size before DATA)

SSL/TLS Certificate: [Browse]

SSL/TLS Certificate Password: [Text Field]

Max Message Size (bytes): 0

Receive timeout (ms): 30000

Options:

- ☐ Require authentication
- ☐ Require secure connection
- ☐ Only allow clear text authentication over secure connection

OK Cancel

# System Registry in GNA

Fill in:

- SMTP Host Name
- SMTP Port

Can be set to anything:

- Default Sender
- User ID and Password

The screenshot shows the 'System Registry Maintenance' window with the 'Options' tab selected. The 'SMTP Setup' section is highlighted with a red box. It contains the following fields:

- Host Name: 127.0.0.1
- User ID: User
- Password: [password]
- Port: 5655

A red callout box with the text 'User ID & Password can be anything' points to the User ID and Password fields. Other visible fields include 'Default Sender' (set to 'test'), 'Online Start After in Second' (100), 'Batch Max Records' (100), and various barcode and font settings.

System Registry Parameters Version 6.0 +

Govern Administrator (GNA) > Menu Parameters > General Settings Editor

Change Registry Filter to 'GENERAL'

Find Section Name 'SMTP'

# Starting the Process

- Double check if listening





# Email Notifications

- Click on the SMTP4dev email icon to view notifications.
- For info ....
  - Inspect
  - View

