tracasa

Transfer Services between Servers

Document history

Version	Author/reviewers	Date	Comments
1.0	Iratxe Orbe	11/12/2014	This document explains the Services Transfer Tool.

Description

This tool allows migrating services from one server to another.

Environment requirements

The tool is developped to run under Arcgis 10.2 (Python2.7)

The Python module pymssql is a database interface to Microsoft SQL Server. This python module should be installed in the server/s where the tool is going to be executed or displayed as a geoprocessing tool. The version to install is 2.0.1 for Python 2.7.

The ArcGIS services sources must be placed in a path according to the following structure: *server_name**x**arcgisserver*\...

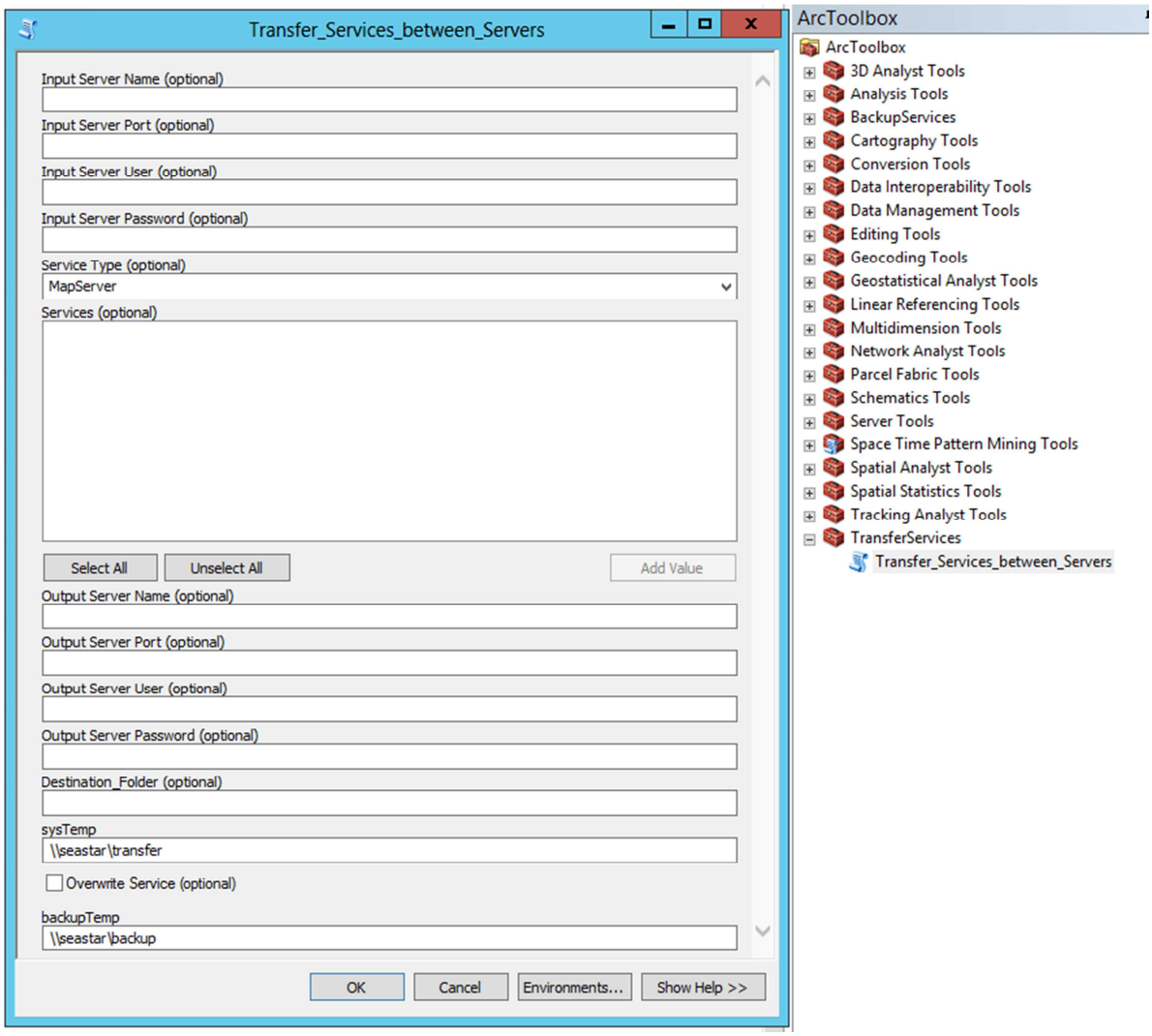
The user that executes the tool or/and the user from ArcGIS Server that uses the geoprocessing service, should be able to access to each network path where the service's sources are placed in order to copy them. Also needs permission to store in C: a copy of the services.

The server where the geoprocessing service is displayed or the one where the tool is executed requires space to store a copy of all the sources of the migrated services.

Installation

ArcGIS Tool

ArcGis tool is placed in the toolbox called "EEA Generic Tools". Inside this toolbox is the "ArcGis Server Tools" toolset. There is located the "Transfer Services between Servers" tool.



Geoprocessing Service

To publish a geoprocessing service, first of all, the “Transfer Services between Servers” tool should be executed.

When the result is in the Results window and an administrator or publisher connection to an ArcGIS Server is needed. To publish the service, right-click the result and choose Share As > Geoprocessing Service.

Example:
http://geotool.discomap.eea.europa.eu/arcgis/rest/services/TransferServices/GPServer/Transfer_Services_between_Servers/submitJob

Functionality

The script uses eleven parameters. Only the last one is optional:

[1] Input Server Name (string)

The host name of the origin server. Typically a single name or fully qualified server, such as myServer.esri.com

[2] Input Server Port (string)

The port number for the origin ArcGIS Server. Typically this is 6080. If you have a web adapter installed with your GIS Server and have the REST Admin enabled you can connect using the web servers port number.

[3] Input Server User (long)

Administrative username.

[4] Input Server Password (string)

Administrative password.

[5] Service Type (string)

The type of the service to migrate.

[6] Services (Multiple Value)

One or more services to perform an action on. The tool will autopopulate with a list of services when the first 5 parameters are entered. Service names must be provided in the <ServiceName>.<ServiceType> style.

[7] Output Server Name (string)

The host name of the end server. Typically a single name or fully qualified server, such as myServer.esri.com

[8] Output Server Port (long)

The port number for the final ArcGIS Server. Typically this is 6080. If you have a web adapter installed with your GIS Server and have the REST Admin enabled you can connect using the web servers port number.

[9] Output Server User (string)

Administrative username.

[10] Output Server Password (string)

Administrative password.

[11] (optional) Folder (string)

A destination folder different from the original/s one/s can be introduced.

[12] (Overwrite_Service) Folder (boolean)

Allows overwriting a service when already exists. A backup of the old service will be done.

The script uses the username and the password to connect to the original and destination server with a generatetoken action. After accessing to the original server, all services are listed. When the user selects the services to migrate and fills all the parameters the process starts.

Firstly, a copy of the selected service's sources is made, this copy is placed in the X device. After that, all the service's properties are read and modified in the copy done in the X.

The tool checks if in the destination server exists a folder with the same name as the original one, or with the name defined as a parameter. If not the folder is created.

Once the folder is created the tool publish the service using the copied sources.

Is important to notice that if the service has special permission (can not access to it everyone), also this permission is set in the new service. The procedure is:

- In case the role exists in the destination server: Only the access permission is assigned to the service.
- In case the role does not exists in the destination server: The role is created with the same characteristics of the original one, the role privileges are assigned to the role and the users within that role are transferred.

Note: When the users are copied from one server to another it is not possible to transfer the password of the user so is set by default.

The results are recorded in a database. The database where the results are registered is: ArcGisStatistics and the name of the table is WebServicesMigration.

The table's structure:

	Migratio...	WebService	ServiceType	FromArcGisServer	ToArcGisServer	MigrationUser	Machi...	Sources	Date	Status
1	36	SampleWorldCities.MapServer	MapServer	cow1	weta	orbe	serval	c:\users\orbe\app...	2014-08-29 12:07:00...	Service already exists in the server and can...
2	38	Bio//Biogeographicalregions_Dyna_L...	MapServer	cow1	weta	orbe	serval	c:\users\orbe\app...	2014-08-29 12:07:41...	
3	39	Life//LifeProjects_Dyna_WM.MapSer...	MapServer	cow1	weta	orbe	serval	c:\users\orbe\app...	2014-08-29 12:07:41...	Service already exists in the server and can...
4	40	NoiseWatch//NoiseWatch_Dyna_W...	MapServer	cow1	weta	orbe	serval	c:\users\orbe\app...	2014-08-29 12:07:56...	
5	41	ProtectedSites//Natura2000Query_W...	MapServer	cow1	weta	orbe	serval	c:\users\orbe\app...	2014-08-29 12:18:12...	
6	42	prueba_migracioon//borrar.MapServer	MapServer	cow1	weta	orbe	serval	c:\users\orbe\app...	2014-08-29 12:18:28...	
7	43	prueba_migracioon//borrar.MapServer	MapServer	cow1	weta	orbe	weta	c:\users\orbe\app...	2014-08-29 13:13:43...	Consolidating the data failed. Please check...
8	44	SampleWorldCities.MapServer	MapServer	cow1	weta	orbe	weta	c:\users\orbe\app...	2014-08-29 13:13:58...	Service MXD not found.
9	46	ProtectedSites//CDDA_Dyna_LAEA....	MapServer	cow1	weta	orbe	weta	C:\temp\201493_9...	2014-09-03 09:55:55...	
10	47	ProtectedSites//CDDA_Dyna_LAEA....	MapServer	cow1	weta	arcgis	weta	C:\arcgisserver\dir...	2014-09-03 10:13:31...	Service already exists in the server and can...
11	48	ProtectedSites//CDDA_Dyna_LAEA....	MapServer	cow1	weta	arcgis	weta	C:\arcgisserver\dir...	2014-09-03 10:24:02...	Service already exists in the server and can...
12	49	Bio//LifeProjects_Dyna_WGS84.Map...	MapServer	cow1	weta	arcgis	weta	C:\arcgisserver\dir...	2014-09-03 10:24:36...	Service MXD not found.
13	51	ProtectedSites//CDDA_Dyna_LAEA....	MapServer	cow1	weta	arcgis	weta	C:\arcgisserver\dir...	2014-09-03 10:26:16...	Service already exists in the server and can...
14	52	ProtectedSites//CDDA_Dyna_LAEA....	MapServer	cow1	weta	arcgis	weta	C:\arcgisserver\dir...	2014-09-03 10:27:13...	Service MXD not found.
15	53	ProtectedSites//CDDA_Dyna_LAEA....	MapServer	cow1	weta	orbe	weta	C:\temp\201493_1...	2014-09-03 10:33:31...	

If the state is filled means that an error has occurred during migration.

The tool has been implemented as a geoprocessing service to allow being usable from "any machine" located in the DMZ1 or the EEA network and to require minimal configuration.

An interface has been developed to do the interaction more friendly:

http://discomap.eea.europa.eu/trial/serviceTransfer/