

Azure Blob Storage Connector

For TotalAgility & RPA

Tom Coppock

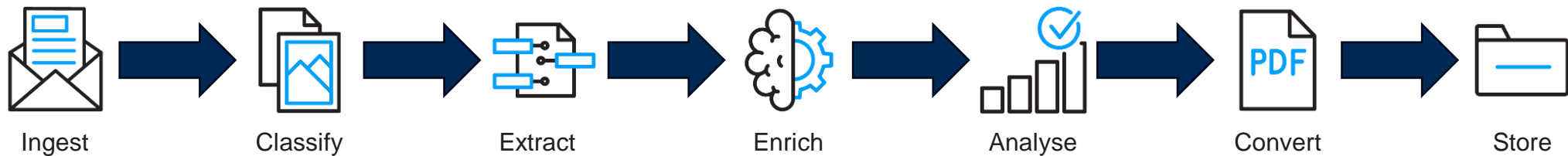
Senior Manager, Solutions Engineering

TUNGSTEN
AUTOMATION **FORMERLY**
KOFAX

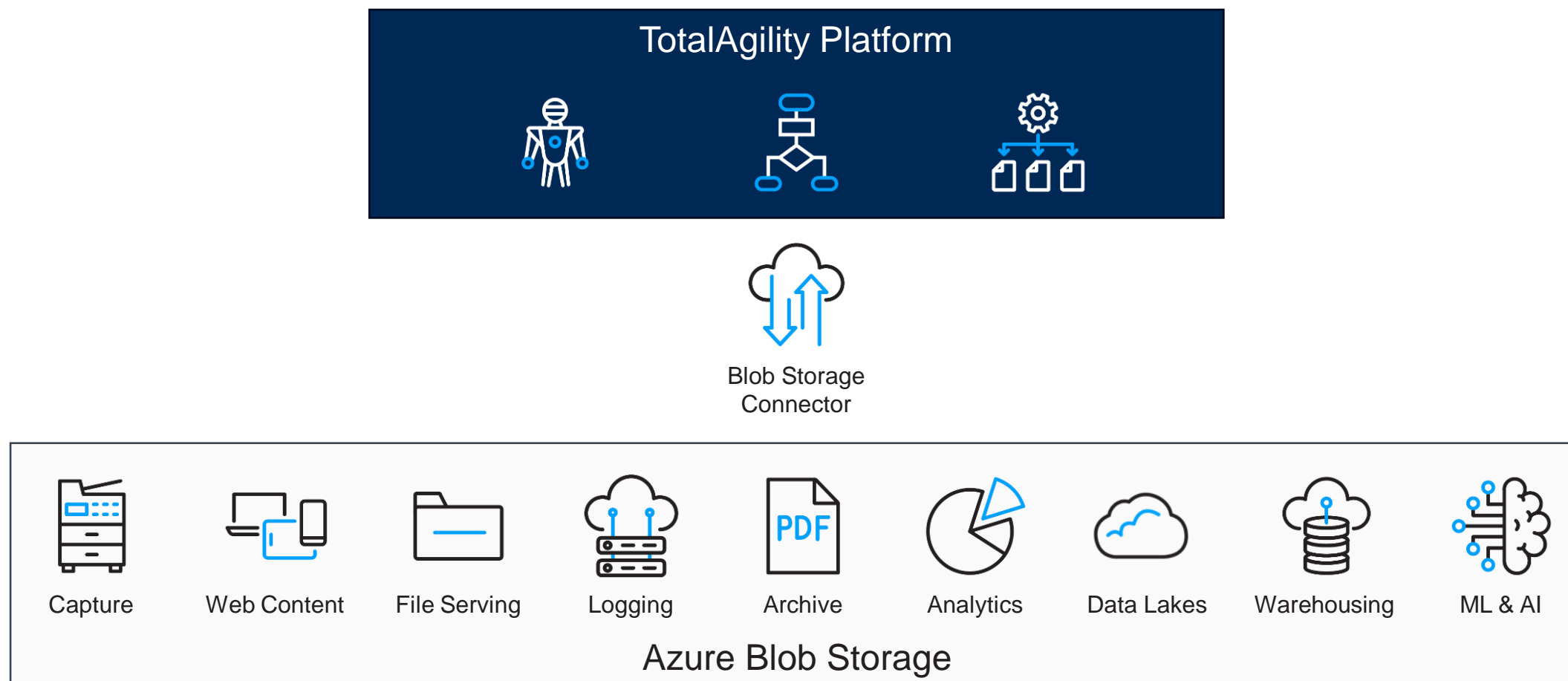
Agenda

- TotalAgility use cases for Azure Blob Storage
- Connector Architecture
- Calling the Connector in TotalAgility
- Connector Details
- Getting the Connector on the Marketplace
- Deploying the Connector Function
- Importing the TA Project

Use Cases for Azure Blob Storage



Use Cases for Azure Blob Storage



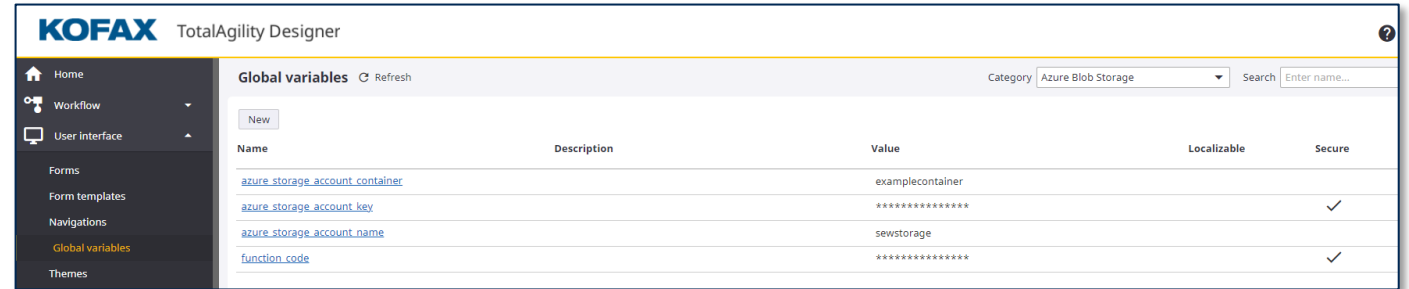
Connector Architecture

- Deploys as an Azure Serverless Function
 - Low cost (pay as you go, 1m requests per month for free)
 - Highly Scalable
 - Stateless
 - Synchronous
 - Transient (retains no data)
 - Deploy in any Azure region
- Accepts JSON over HTTPS
- Implemented in node.js
- Integrates with Blob Storage using Web Services
 - Via the node.js client library for Azure Blob Storage
- TotalAgility Custom Services & Data Models

Connector Details

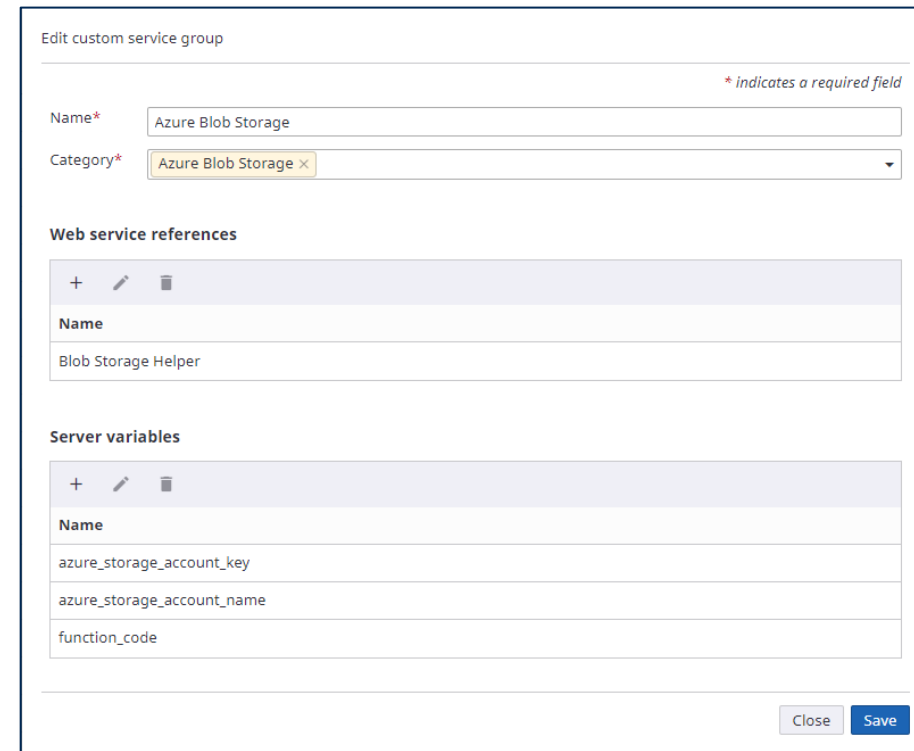
- Category
- Global form variables
- Custom Service Group
 - REST Web Service Reference for the function
 - Server variables for the account name, key & function access code

ACTION: Update variables & web service with details for your environment



The screenshot shows the 'Global variables' section of the KOFAX TotalAgility Designer. It includes a 'New' button and a table with columns: Name, Description, Value, Localizable, and Secure. The table lists four variables: 'azure_storage_account_container' with value 'examplecontainer', 'azure_storage_account_key' with a masked value '*****' and a secure flag, 'azure_storage_account_name' with value 'sewstorage', and 'function_code' with a masked value '*****' and a secure flag.

Name	Description	Value	Localizable	Secure
azure_storage_account_container		examplecontainer		
azure_storage_account_key		*****		✓
azure_storage_account_name		sewstorage		
function_code		*****		✓



The screenshot shows the 'Edit custom service group' dialog box. It has fields for 'Name*' (Azure Blob Storage) and 'Category*' (Azure Blob Storage). Below these are sections for 'Web service references' and 'Server variables'. The 'Web service references' section contains one entry: 'Blob Storage Helper'. The 'Server variables' section contains three entries: 'azure_storage_account_key', 'azure_storage_account_name', and 'function_code'. There are 'Close' and 'Save' buttons at the bottom right.

Edit custom service group

* indicates a required field

Name*

Category*

Web service references

Name
Blob Storage Helper

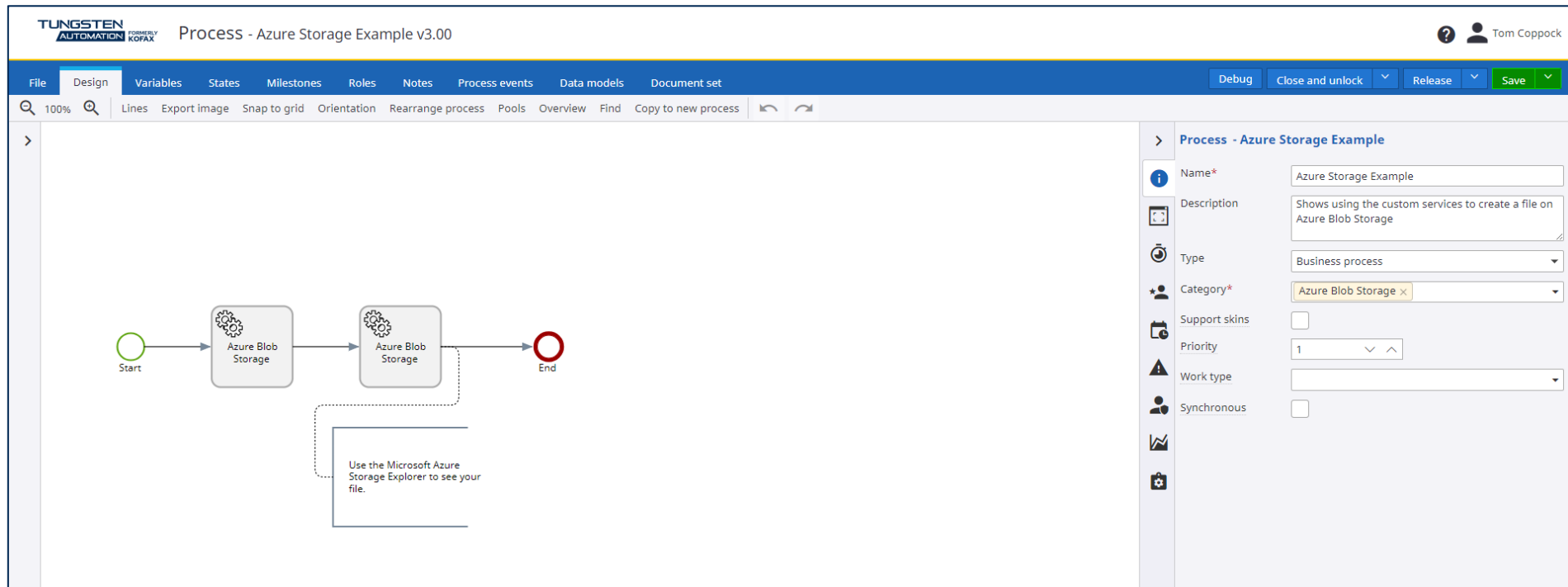
Server variables

Name
azure_storage_account_key
azure_storage_account_name
function_code

Close Save

Calling the Connector in TotalAgility: Example Process

- Azure Storage Example shows creating a file using the Custom Services



Calling the Connector in TotalAgility: Example Form

- /forms/Azure%20Storage%20Browser%20Example.form

Azure Blob Storage Browser Example

Storage Account: sewstorage Container: tomcoppock

Upload a File to Blob Storage

Select a file or drag it here:

Drag&Drop files here

Upload

Name	Created	Last Modified	Content Type	Content Len...	Actions
FY21FinancialHighlights.pdf	05/03/2024 18:43:20	05/03/2024 18:43:31	application/octet-stream	153586	<div>Download Delete</div>

- The form will create a new container using the username when it is first loaded

Connector Details: Data Models

- Data-models for the request & response data

Data models Refresh			
Category Azure Blob Storage			
New			
Name	Locked by	Last modified by	Last modified date
Blob Storage Helper Request Data Model		Tom Coppock	05/03/2024 19:06:43
Blob Storage Helper Response Data Model		Tom Coppock	01/03/2024 15:50:55

TUNGSTEN
AUTOMATION
FORMERLY KOFAX

Data model - Blob Storage Helper Request Data Model v5.000

FileDesign

Load from external sourceField

Find...

Blob Storage Helper Request Data Model

Blob Storage Helper Request Data Model

azure_storage_account_name

azure_storage_account_key

azure_storage_account_container

optional_directory

optional_file_name

optional_file_content_as_base64

action

Data model - properties - Blob Storage Helper Request Data Model

General

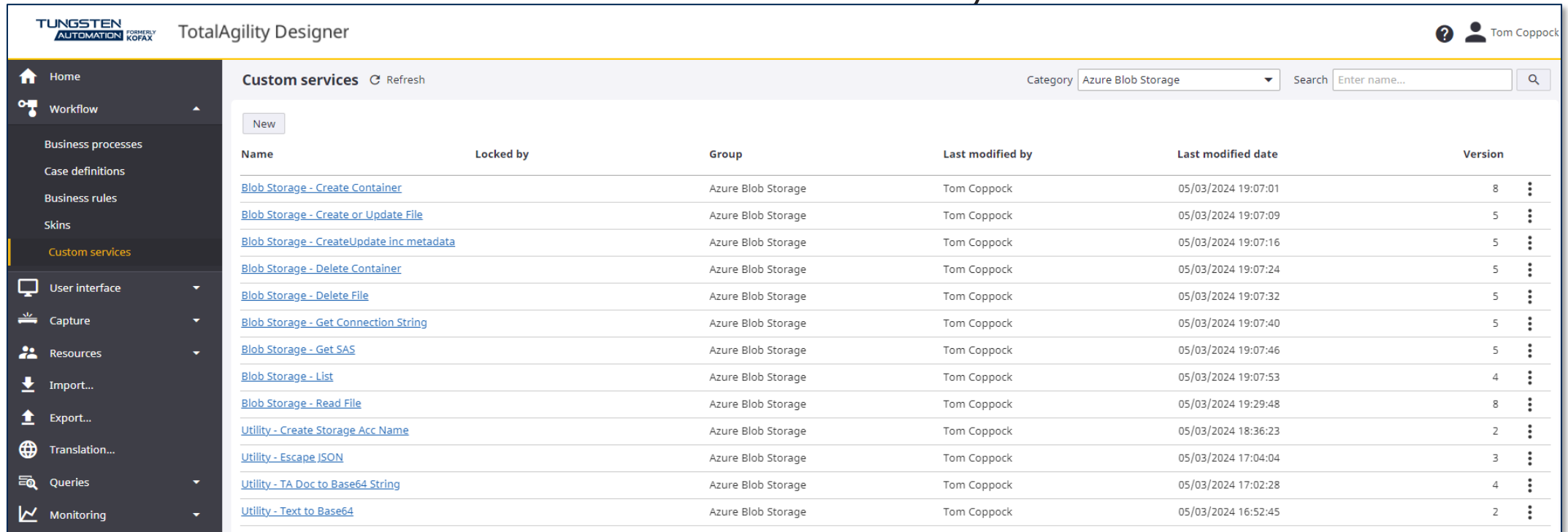
Name *Blob Storage Helper Request Data Model

DescriptionData Model to hold the different possible responses from the Blob Storage Helper function.

Category *Azure Blob Storage

Connector Details

- Custom services for each action & additional utility services



The screenshot displays the 'TotalAgility Designer' interface. On the left is a dark sidebar with navigation options: Home, Workflow, Business processes, Case definitions, Business rules, Skins, Custom services (highlighted), User interface, Capture, Resources, Import..., Export..., Translation..., Queries, and Monitoring. The main area is titled 'Custom services' and includes a 'Refresh' button, a 'Category' dropdown set to 'Azure Blob Storage', and a search bar. Below this is a table of custom services.

Name	Locked by	Group	Last modified by	Last modified date	Version
Blob Storage - Create Container		Azure Blob Storage	Tom Coppock	05/03/2024 19:07:01	8
Blob Storage - Create or Update File		Azure Blob Storage	Tom Coppock	05/03/2024 19:07:09	5
Blob Storage - CreateUpdate inc metadata		Azure Blob Storage	Tom Coppock	05/03/2024 19:07:16	5
Blob Storage - Delete Container		Azure Blob Storage	Tom Coppock	05/03/2024 19:07:24	5
Blob Storage - Delete File		Azure Blob Storage	Tom Coppock	05/03/2024 19:07:32	5
Blob Storage - Get Connection String		Azure Blob Storage	Tom Coppock	05/03/2024 19:07:40	5
Blob Storage - Get SAS		Azure Blob Storage	Tom Coppock	05/03/2024 19:07:46	5
Blob Storage - List		Azure Blob Storage	Tom Coppock	05/03/2024 19:07:53	4
Blob Storage - Read File		Azure Blob Storage	Tom Coppock	05/03/2024 19:29:48	8
Utility - Create Storage Acc Name		Azure Blob Storage	Tom Coppock	05/03/2024 18:36:23	2
Utility - Escape JSON		Azure Blob Storage	Tom Coppock	05/03/2024 17:04:04	3
Utility - TA Doc to Base64 String		Azure Blob Storage	Tom Coppock	05/03/2024 17:02:28	4
Utility - Text to Base64		Azure Blob Storage	Tom Coppock	05/03/2024 16:52:45	2

- **ACTION:** Map the TotalAgility SDK & System Session ID if you use:
 - *Utility – TA Doc to Base64 String*

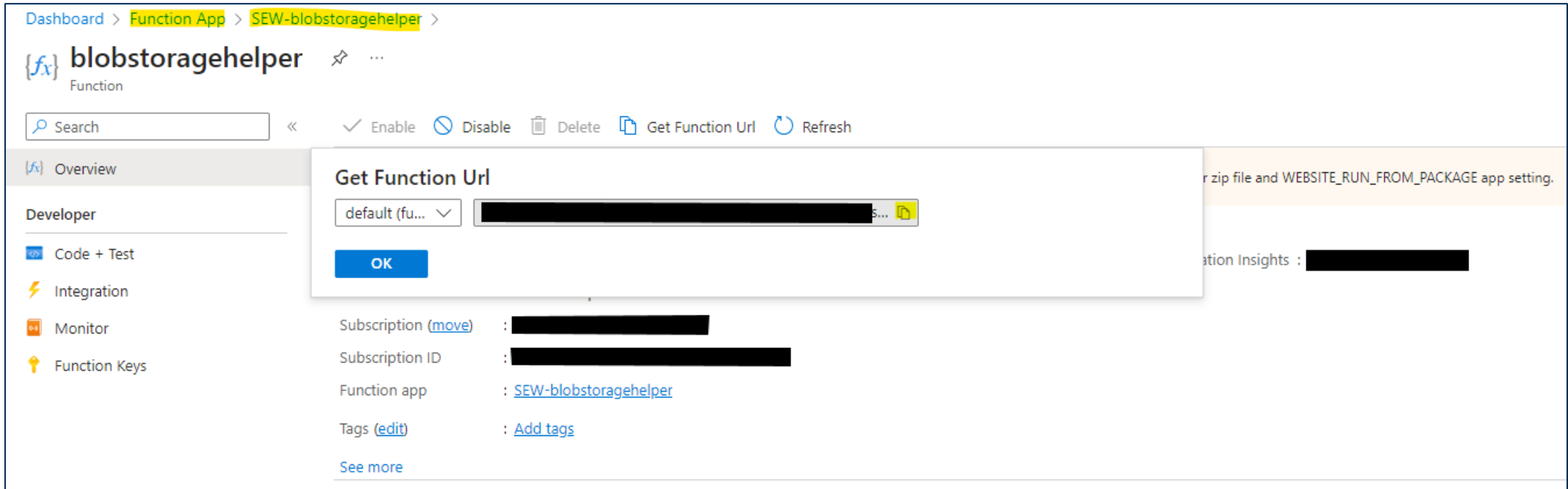
Getting the Connector on the Marketplace

Deploying the Connector Function on Azure

- Download the Connector code & unzip
- Create an Azure Account / Subscription
- Install & Connect the Azure CLI Tool
- Open a terminal
 - Change to the directory with the unzipped files
 - Run “az login”
 - Follow the deploy steps in the README.MD
 - Update the variables in the command line as appropriate

Deploying the Connector Function on Azure

- Once deployed, get the function URL & access code as shown
- This is used to populate the appropriate global variables in TotalAgility



The screenshot displays the Azure Portal interface for a Function App named 'blobstoragehelper'. The breadcrumb navigation at the top shows 'Dashboard > Function App > SEW-blobstoragehelper >'. The function name 'blobstoragehelper' is prominently displayed with a 'Function' label below it. A search bar and a set of action buttons (Enable, Disable, Delete, Get Function Url, Refresh) are located below the function name. The left sidebar contains navigation links for 'Overview', 'Developer', 'Code + Test', 'Integration', 'Monitor', and 'Function Keys'. A modal dialog titled 'Get Function Url' is open in the center, showing a dropdown menu set to 'default (fu...)' and a text input field containing a URL. Below the dialog, the 'Overview' section lists key information: 'Subscription (move)' with a redacted value, 'Subscription ID' with a redacted value, 'Function app' as 'SEW-blobstoragehelper', and 'Tags (edit)' as 'Add tags'. A 'See more' link is at the bottom of this section. On the right side of the page, a warning banner mentions a 'zip file and WEBSITE_RUN_FROM_PACKAGE app setting', and a 'Deployment Insights' section shows a redacted value.

Importing the TA Project

- Import the package from the *example_totalagility* folder
- Edit the web service reference & variables in the Custom Service Group
- Test individual custom services or the example process / form as required
- Include the custom services in your own projects

Thank You

© 2024 Tungsten Automation Corporation. Tungsten Automation, Tungsten, & the Tungsten Automation logo are trademarks of Tungsten Automation Corporation. All other trademarks are the property of their respective owners.

