Azure Resource Naming Conventions

Last updated by | Mike Bijl | Mar 5, 2024 at 11:56 AM GMT+1

FSCP Owner: To be determined
Target Audience: FSCP

Azure Resource Naming Conventions

This page is pending guidance from D&E to determine the final status.

Contents

Azure naming conventions

This section describes the CBSP Azure naming conventions for Azure services/objects.

Drivers: Why naming conventions

CBSP Azure uses the naming conventions below for Azure resources:

- to make sure that provisioning does not fail on incorrect Azure object naming (due to limitations within Azure itself)
- to have readable and identifiable object names
- to have a structured and consequent implementation of all Azure objects.

Note: automatic parsing of objects is not in scope as a driver for naming conventions, as metadata of objects can also be obtained via the object itself.

Scope: Naming unicity

Naming policies are dependent on the scope of the resource type within Azure – especially when they are external (publicly) facing. The following scopes are distinguished:

- *Worldwide* unique names
- *Customer* (DNS zone) unique names: With ABN AMRO the name is unique
- *Subscription* unique names
- *Region* unique names: Most probably a suffix (FQDN of the service type) includes the region
- *Other*: Fill in the scope of the resource type

Rule of thumb: Don't make public resources easy identifiable for hackers, unless explicitly desired. Therefore, don't use the bank's name or abbreviation within solution short names.

Object naming policies

Use the following rules as a general standard to create a name for an Azure resource:

- All lower case.
- Use dashes between elements to separate them (if this is allowed for the service name); this makes it more readable and easier to parse.
- Use the elements below, in the order described, to create a resource name:
  - *Solution*: Use a solution short name (abbreviation) as a prefix for the service.
    See the Solution short names section below for guidance on what values to use.
  - *Environment*: one character;
    See the Environment Acronyms table below for allowed values.
  - *Free field*: optional; can be used to add resource type specific info.
    Only numbers and letters allowed (no others such as dashes); maximum length is dependent on the maximum length of a resource type. Note: If no free field is used, only use one dash between environment and sequence number.
  - *Sequence number*: two characters, numbers only, starting with '01';
    Increase when there is more than one resources type within the same **scope**.
  - *Resource Type:* Add the service type abbreviation (acronym) as a postfix.
    See the Resource Type table below for allowed values.
    Note: If the abbreviation has been set to 'none' in the table, no dash is added (so the resource name is not ending on a dash but on the sequence number).

Solution short names

A Solution Name is registered by the customer, together with an OAR ID.
Solution short names are defined by the CBSP Azure customer team, based on that solution name, in close contact with the customer.
It is administrated in the EPIC description. All existing solution short names are reflected in the is the Azure DevOps Code repository, under Azure / CBSP-Azure / CustomerSolutions.

Note: a solution short name can also be CBSP Azure platform generic (such as: infra, diags, asc, and so on). In that case, the CBSP Azure (Platform) team defines a fitting abbreviation (see also Network Zones and Tiers).

Environment Acronyms

This table shows environment names and their identification acronym to be used:

Environment Type Name	Identification Acronym	Used For
Engineering	e	CBSP Azure Engineering environments
Development	d	Solution environments running in **Production subscriptions** for workloads with **Development** status
Test	t	Solution environments running in **Production subscriptions** for workloads with **Test** status
Acceptance	a	Solution environments running in **Production subscriptions** for workloads with **Acceptance** status
Production	p	Solution environments running in **Production subscriptions** for workloads with **Production** status

Resource types

The table below explains how the naming convention is build up for a given resource type.
Note: If not explicitly stated otherwise, the character set can include Alphanumeric, hyphen, underscore, and period.

Resource Type Name	Acronym	Length	Character set/Restrictions	Scop
Analysis Services	**as**		Alphanumeric only, no dashes, 3-63 characters <solution short name><environment><sequence number>as	Regi asazu name
Application Gateway	**ag**		<servicename>-<environment>-ag	Reso
App Service Environment	**ase**		<servicename>-<environment>-ase	Custo
App Service (Isolated and Public)	<none>		For Non-Production Environments: <servicename>-<environment> For Production Environment: <servicename>	App and I
App Service Plan	**asp**		<servicename>-<environment>-asp	Reso
Application Insights	**ai**		<servicename>-<environment>-ai	Reso
Availability Set	**aset**	1-80	<servicename>-<environment>-<virtualmachinename>-aset	Reso
Bot Channels Registration	**bcr**	<none>	Bot handle and name. The name can be changed later	Reso
Container Registry	**cr**	5-50	Resource names may contain alpha numeric characters only	Reso
Container Services	**cs**			
Custom Role		See Custom Roles Wiki Page		
Database for MySQL server	<none>		Can only contain lowercase alpha numeric characters and/or the following special characters: "$" or "_". The database name cannot be one of these reserved words: *mysql*, *information*, *performance* and *schema*.	Worl
Databricks	**dbr**			Reso

Resource Type Name	Acronym	Length	Character set/Restrictions	Scop
Data Catalog	**dc**		Only one data catalog can be provided per tenant.	Custo
Data Factory	**df**		Name may become publicly available as a DNS Name in the future and hence become publicly available	Reso
Data Lake Analytics	**dla**		Name should contain only lowercase letters and numbers.	Worl
Data Lake Storage	**dls**		Name should contain only lowercase letters and numbers.	Worl
Data Lake Storage folder	<none>			Othe
Dashboard	**dashboard**		Alphanumeric only, no dashes, 3-63 characters <solution short name><sequence number>	Reso
ExpressRoute Circuit	**cir**	1-80	<servicename>+<region(2-3)><circuitnumber(2)>-<peering location(3-4)>-<provider(3-4)-<environment(1)>-cir	Reso
ExpressRoute Circuit v3	**cir**	1-80	er-<region>-<peering location>-<AAB-DC>-<used by environmenttype>-cir(count)	Reso
ExpressRoute Connection (part of VNGW)	**conn**	1-80	<solution name+region+count>-<used by environment>-<express route or VPN>-<service>	Reso
Virtual Network Gatewat	**vng**	1-80	<solution name+region+count>-<peering location>-<meetme location>-<AAB DC>-<used by environment>-<resource suffix>	Reso
Firewall	**afw**	1-80	<servicename>+<region><environmentnr(2)>-<environment(1)>-afw	Reso
IP Group	**ipg**	1-80	<solutionname>-<FunctionalName><region><environmentnr(2)>-<environment(1)>-ipg	Reso IPGr <env

Resource Type Name	Acronym	Length	Character set/Restrictions	Scop
Firewall Application, Network or NAT Rule Collection	**arc** **nrc** **nat**	1-80	**Generic:** generic<collectionnr(2)>-<access>-arc, nrc or nat **Product:** <product shortname><collectionnr(2)>-<access>-arc, nrc or nat **Solution:** <solutionname><environmentnr(2)>-<environment>-<access>-arc, nrc or nat	Azur
Firewall NAT Rules	<none>	1-80	**Generic:** tbd **Product:** tbd **Solution:** <sourcedescription>-to-<destinationdescription>-<protocoldescription>-<destination>	NAT

Resource Type Name	Acronym	Length	Character set/Restrictions	Scop
Firewall Network Rules	<none>	1-80	**Generic:** <source>-<protocol (+ port)>-<destination> **Product:** <source>-<protocol (+ port)>-<productname> <region> **Solution:** <vnetname>-<subnetname>-<protocol (+ port)>- <destination>	Netw
Firewall Application Rules	<none>	1-80	**Generic:** <source>-<destination> **Product:** <source>-<servicename> **Solution:** <vnetname>-<subnetname>-<destination>	Appl
Azure Firewall Policies	**afp**	1-80	**Base** <solution name+base>-<region>-<resource suffix> **Solution** <solution name+shared+region+count>- <used by environments>-<resource suffix>	Azur
Azure Firewall Policies - Rule	<none>	1-80	**Base:** Base-generic<collectionnr(2)>-<access>-arc, nrc or nat **Solution:**	Rule

Resource Type Name	Acronym	Length	Character set/Restrictions	Scop
Collection Groups			<solutionname><environmentnr(2)>-<environment>-<access>-arc, nrc or nat	
HDInsight Cluster	**hdi**	1-59	Name can contain letter or numbers or hyphens. But the first or the last character need to be a letter or a number. Name can not contain a reserved keyword.	Worl
Azure Kubernetes Service	**aks**	1-50	Name can contain letter or numbers or hyphens. But the first or the last character need to be a letter or a number. Name can not contain a reserved keyword.	Worl
Integration Runtime (including Data Management Gateways)	**ir**		<SolutionShortName>-<environment>-<seq nr>-ir	Subs
Key Vault	**kv**		<servicename>-<environment>-<sequence number>-kv	Worl
LogicApp	**la**	1-80	<servicename>-<environment>-la	Reso
Load Balancer	**lb**	1-80	<virtual machine name>-lb	Reso
Network Security Group	**nsg**	1-80	<vnetname>-<subnetname>-nsg *Auto generated as part of VNet deployment. 1:1 relationship between vnet/subnet and NSG*	Reso
Network Security Group Rules	<none>		<NSG name>-<tier>-<direction>-<source>-<action>	Reso
Network Interface	**nic**	1-80	<virtual machine name>-nic	
Policy	-	24	see https://dev.azure.com/cbsp-abnamro/Azure/_wiki/wikis/Azure.wiki/57152/Azure-Policy-Standards	
Public IP Address	**pip**	1-80	<(solution name+region+count) + IP count>-<used by environment>-<resource suffix>	Reso
Public IP Prefix	**pipfx**	1-80	<solution name>-<region>-<used by environment>-pipfx<instance number>	Reso

Resource Type Name	Acronym	Length	Character set/Restrictions	Scop
QnA Maker	**qm**	<none>	<QnA Maker name>-qm	Reso
Recovery Services Vault	**rsv**	1-63	<servicename>-<environment>-rv	Reso
Resource Group	**rg**	8-13	<servicename shortname>(4-6)-<environment>-rg VNet (related) resources: <solutionname> <environmentnr(2)>-vnets-<environment(1)>-rg	Subs
Route Table	**routetable**		<vnetname-<subnetname>-routetable *Auto generated as part of VNet deployment. 1:1 relationship between vnet/subnet and Route Table*	Reso
Service Principal	**sp**		<servicename>-<environment>-<sequence number>-sp	Azur
SQL Database	<none>		Character set: all except: < > * % & : / and ? Cannot end with a period. Also avoid dashes when using as a HDInsight metastore (see article link above	Othe
SQL Server	<none>	1-63	<SolutionShortName>-<environment>-<sec nr> Name can only contain letter and numbers. Avoid dashes or hyphens in server names when using this as metastore for HDInsight Spark with Hive support. See this article for more info.	Worl
Storage Account	**sa**	3-24	Character set: Lowercase letters and numbers only	Worl *.blo
Subnet	**subnet**	2-80	<subnettype>-subnet Depending on Dedicated or Shared VNet usage and place in bigger network picture. Part of Network Solutioning	Othe (vnet
Subscription	<none>	1-64	Name cannot contain the: [ ] < > * % # & : / . <AAB entity(3)><CountryCode(2)> AZ <FunctionalName>	Ente

Resource Type Name	Acronym	Length	Character set/Restrictions	Scop
Virtual Machine	**vm**	1-15 (Win+ Linux domain joined) 1-64 (Linux non-domain joined)	<solutionshortname(2-4)><environmentnr(2)>-<environment(1)>-<roleshortname(2-4)>-<seqnr(2)>	Reso
Virtual Network	**vnet**	2-64	<solutionname><locationacronym><sequencenr(2)>-<environment(1)>-vnet	Reso RG fo <reg <env **FSCP** chara
Log Analytics	**ws**	2-64	<servicename>-<environment>-ws	Reso
Private DNS Zone	**The name of the zone**	1-63 (per label)	There must be between 2 and 34 labels. For example "contoso.com "	Reso net-< <env

Way of Working for adding Resource types

When the resource type needed is not in the table above, please add it to the list, following the following steps:

- **Resource type:**
  - Use the official short name that the CBSP Azure (Products) team has chosen as, based on the Product Naming guidance
  - use the alphabetical order of the resource type name to insert a row
- **Acronym:**
  - Use an acronym length preferably between 2 and 6 characters; avoid long(er) acronym lengths

    - Preferably use the first characters of the Resource Type Short Name as stated in column one of the table
    - Check if the acronym is not already in use; if so, extend the added resource type with additional characters (based on the resource short name)
    - Note: if the resource has a full public name (including a suffix automatically added by Azure), consider to leave the acronym blank (<none>)
- **Length:**
    - The minimum and maximum length of the resource type name
- **Restrictions:**
    - Character set (and other) limitations for the resource type name and add this to the restrictions column
- **Scope:**
    - Check the scope and add this to the unicity column
    - If Azure automatically adds a suffix (when the scope is worldwide), add this suffix to this column
- **Example:**
    - Add an example (without the Azure suffix)
- **CBSP Product Tag**
    - Use the Resource Type Name, in Singular form, without spaces,
      and add the three number version after that (with a space in between).

Azure DevOps naming conventions (was VSTS)

Release approvals

For Release approvals, groups are created within Azure DevOps. Azure DevOps groups are used to have correct notification emails sent to the group members. Group names start with a short description followed by Release Approvers (`<short description> Release Approvers`).

Azure Active Directory naming conventions

Users

Scope: @abnamro.onmicrosoft.com (to be defined)

Groups

For Self Service deployment an Azure Active Directory Group is created with the name `<Resource Group name>-devgroup` . The requestor of the Self Service Resource Group is made the owner of the created Azure Active Directory Group.

Service Principals

For Self Service deployment an Azure Active Directory Service Principal is created with the name `<Resource Group name>-spn` .