Microsoft Azure Developer: Connecting to Storage

IDENTIFY CONNECTION REQUIREMENT INFORMATION

Warner Chaves
MS DATA PLATFORM MVP

@warchav sqlturbo.com

What's in this module?

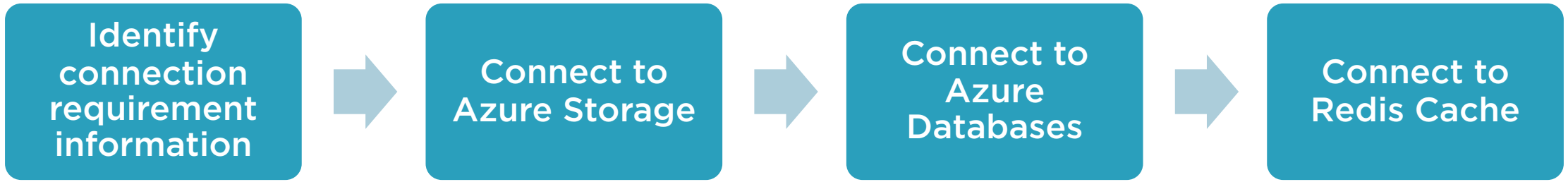
Course Overview

Basic Network Security

Resource Names

Authentication and Authorization

Course Overview



Connecting to a Resource

Network Security

Connection Types

Public Endpoint – Internet Facing

Service Endpoint – Virtual Network (VNET) Facing

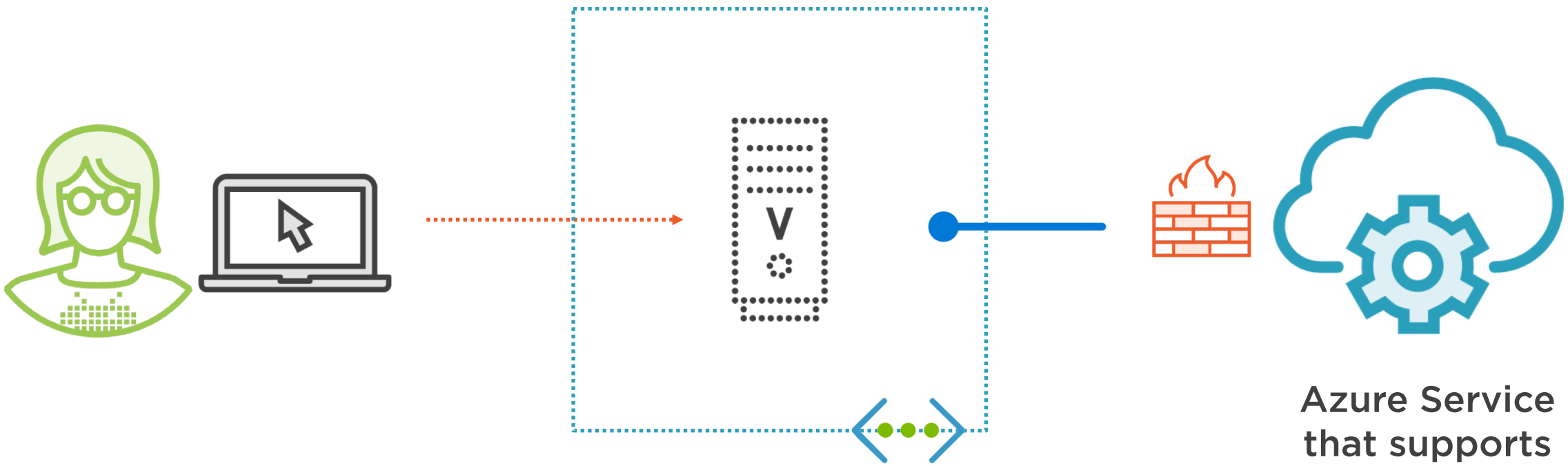
Internal VNET Endpoint – Resource is inside the VNET

Public Endpoint

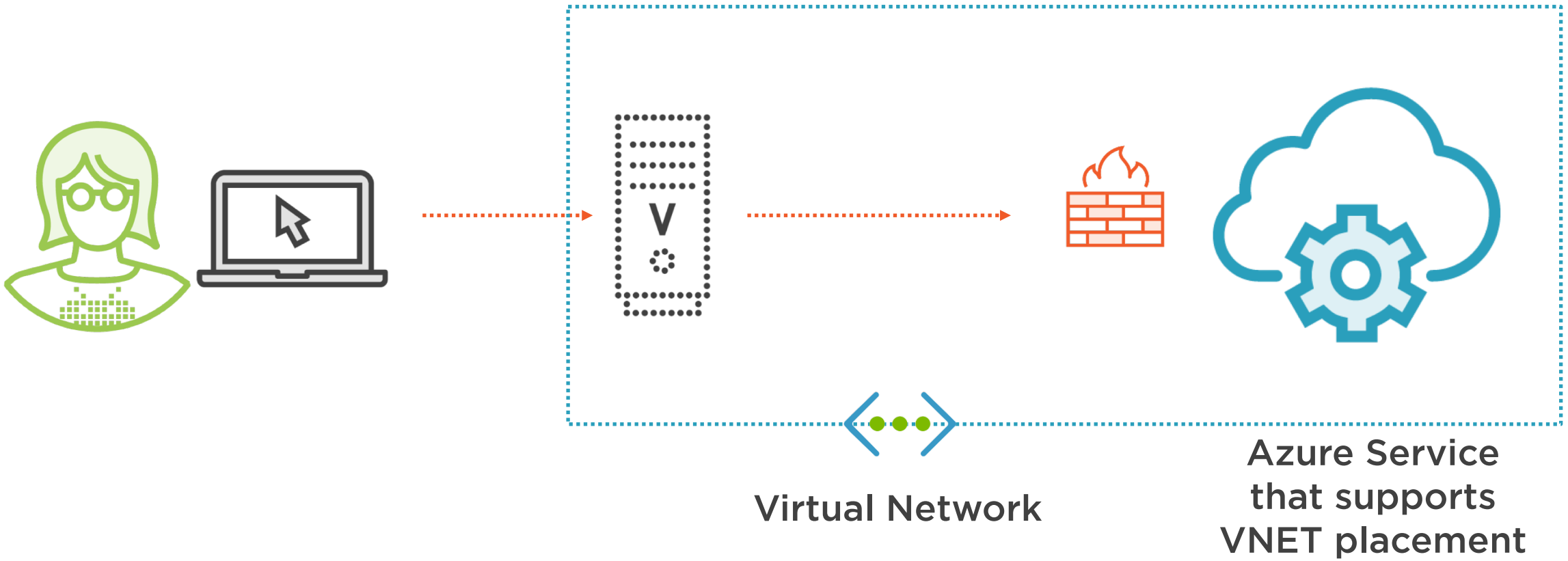
Internet facing endpoint

Proper Firewall settings are critical for Public Endpoint services.

Service Endpoint



Resource Inside the VNET



Troubleshooting Network

Verify if your service has a Public, Service or VNET endpoint

Verify that your client machine is added to any firewall or network security rules

If it's Service or VNET Endpoint, verify that the client is part of the allowed VNET

If it's Service Endpoint, verify that the VNET is allowed on the service

Verify no local firewall is blocking your access

Resource Names

Connecting to a Resource

Different Service Names

https://******.core.windows.net/

TCP:
*****.database.windows.net, port 1433

TCP:
*****.redis.cache.windows.net, port 6380

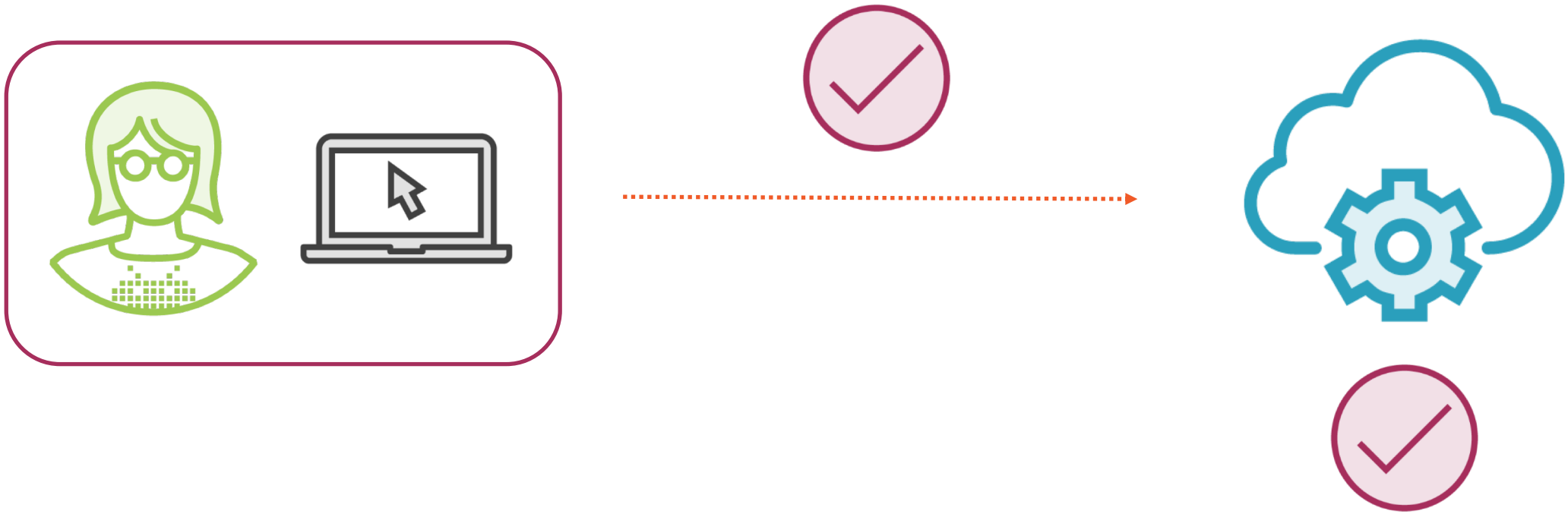
Troubleshooting Names

Verify you have the correct resource name, including case sensitivity

Verify you have the correct port and protocol

Authentication and Authorization

Connecting to a Resource



Authentication

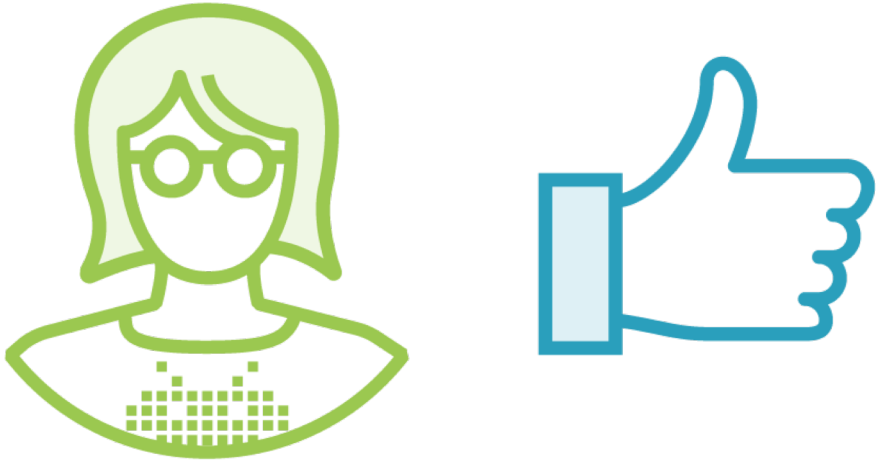
You validate your identity to the service using a set of credentials

Examples

Azure Active Directory account

SQL database username and password combination

Authorization



After being authenticated, the service allows you to perform a specific set of actions based your identity

Keys and Tokens

Keys and Tokens merge authentication and authorization in one credential

Troubleshooting Authentication and Authorization

Verify you have the correct type of credential

Verify you have valid credentials

Verify you have been given proper permissions

Putting Everything Together

It has a public endpoint and our client is on the Firewall

We have the SQL host name

We have an Azure AD account and it has permission to connect

Demo

Gathering information and connecting to Azure SQL Database

Keeping up to Date

In the cloud, service details can change.
Refer to azure.com for the latest information.

Summary

The course will cover connections to Azure Storage, SQL Database, and Redis.

There are 4 pieces necessary to connect:

- Network connectivity
- The resource name
- A way to authenticate
- Authorization to interact with the resource

Put it all together to connect to an Azure SQL Database

Next Module:
Connect to Azure Storage