



Onsight NOW Implementation Guide

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Contents

- Copyright..... ii
- 1. Introduction..... 5
 - 1.1. Requirements..... 5
- 2. Overview.....7
- 3. Deployment & Setup.....9
 - 3.1. ReadMe Prerequisites, Setup & Deployment Parameters..... 9
 - 3.1.1. Prerequisites..... 9
 - 3.1.2. Windows Subsystem for Linux 9
 - 3.1.3. Git Bash (via Visual Studio Code).....10
 - 3.1.4. Setup Continued..... 10
 - 3.1.5. Setup.....11
 - 3.1.6. Advanced Networking.....12
 - 3.1.7. Optional Modules..... 16
 - 3.1.8. Application Registration..... 17
 - 3.1.9. How to Deploy Onsite NOW..... 18
 - 3.2. Implementing Question Answering.....18
 - 3.3. Validating an Onsite NOW Deployment..... 21
- Appendices..... 25
 - Contact Support.....25
 - Glossary..... 26
- Index..... a

1. Introduction

Onsight NOW provides organizations with an intuitive, easy-to-use, elegant, and scalable solution that utilizes standard Microsoft technologies and [Application Programming Interface \(API\)](#)s to capture and deliver knowledge on demand. With Onsight NOW, organizations can:

- Improve search results by using **Ask & Search**;
- Enhance collaboration both within and outside the organization by capturing audio, video, chat history, transcription, and call sentiment;
- Improve response times by delivering proactive recommendations using an [Artificial Intelligence \(AI\)](#) engine;
- Access advanced capabilities such as [Azure Computer Vision](#), [Optical Character Recognition \(OCR\)](#), and [Internet of Things \(IoT\)](#) data;
- Take advantage of knowledge capture and delivery technologies that utilize all existing information sources and integrations.

The Onsight NOW Implementation guide describes how [Azure Government Cloud \(GC\)](#) customers can perform a self-hosted installation. For Azure Public Cloud deployments, customers can substitute regions and resource types as needed. Additionally, Librestream-hosted Public and Government cloud [Software as a Service \(SaaS\)](#) solutions are also available. These solutions are available for testing and evaluation before deploying your self-hosted environment.

1.1. Requirements

Onsight NOW requires an organization to have the following:

1. [Azure GC](#) subscription
2. [Office 365 Government Community Cloud \(GCC\)](#) runs on the Microsoft (MS) [Platform as a Service \(PaaS\)](#), which uses Azure Commercial Infrastructure. This package usually consists of the following applications:
 - Microsoft SharePoint
 - Microsoft Teams
 - Microsoft Outlook
3. [Microsoft Entra ID](#)
4. Linux [Windows Subsystem for Linux \(WSL\)](#) Environment
5. Azure [Command Line Interface \(CLI\)](#)

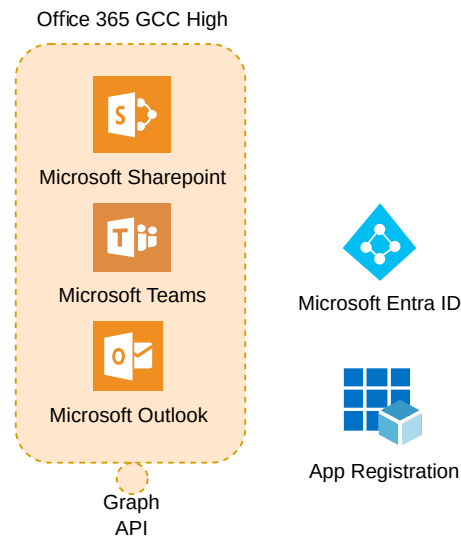


Figure 1-1 Microsoft Requirements

Microsoft Entra ID

[Microsoft Entra ID](#)¹ is Microsoft's enterprise cloud-based [Identity Access Management \(IAM\)](#) platform that provides single sign-on, [Multi-factor Authentication \(MFA\)](#), and internal and external user governance.

1. Microsoft Entra ID is the new product name for Azure Active Directory (AAD) and Azure (AD).

2. Overview

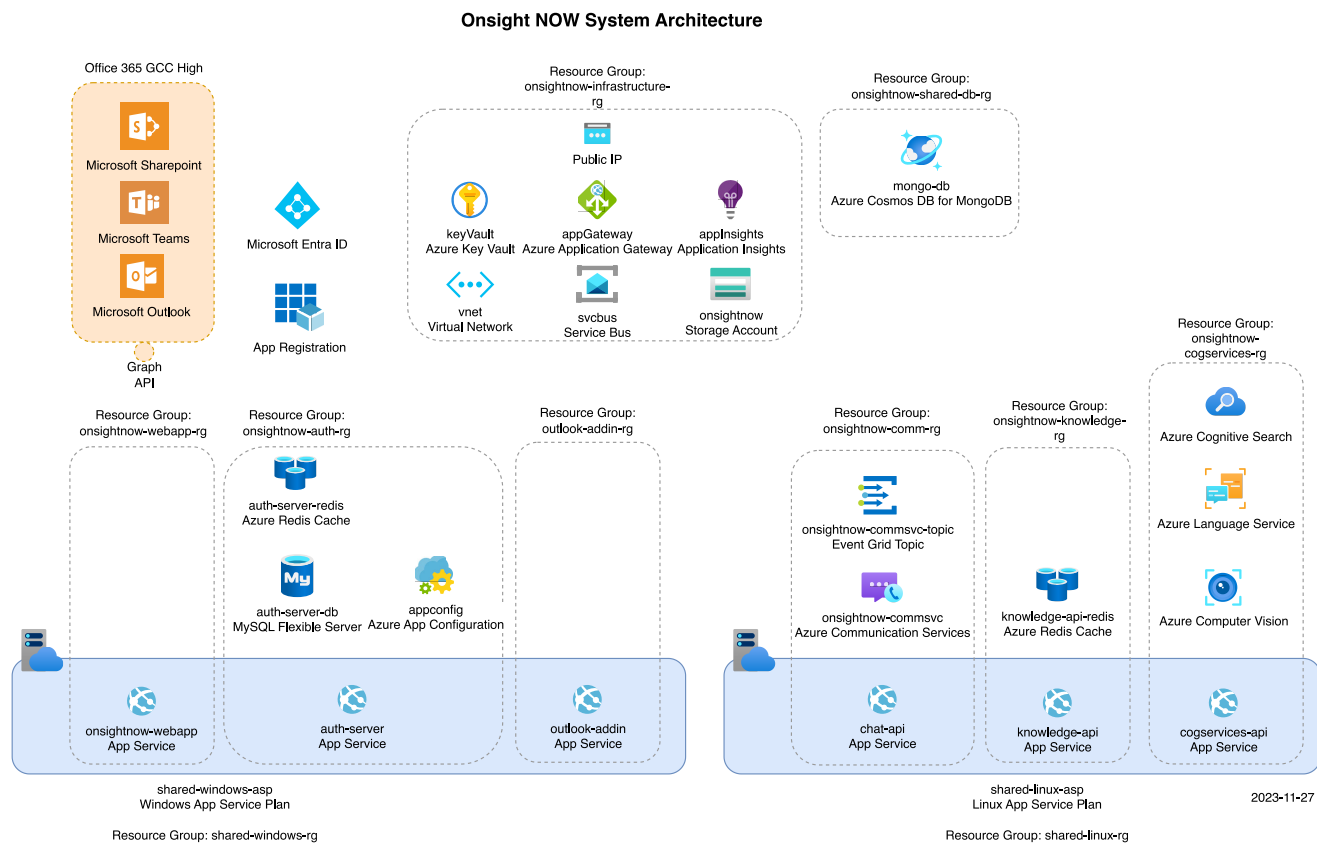


Figure 2-1 Onsight NOW System Architecture

A typical installation package includes **Resource Groups** for both a **Windows** and **Linux** back end that include:

1. Onsight NOW infrastructure resource group (onsightnow-infrastructure-rg)
2. Onsight NOW Shared database (Onsightnow-shared-db-rg)
3. Many resource groups that represent applications, **APIs**, and services for a Windows App Service plan:
 - a. Onsight NOW web application (onsightnow-webapp-rg).
 - b. **Authentication Server** (onsightnow-auth-rg).
 - c. **Outlook add-in** (outlook-addin-rg)
4. Resource groups that represent applications, **APIs**, and communications services for a Linux App Service plan:
 - a. **Chat API** (onsightnow-comm-rg).
 - b. **Knowledge Capture API** (knowledge-rg)
 - c. **Azure Cognitive services** (onsightnow-cogservices-rg).

3. Deployment & Setup

The deployment process for Onsignt NOW consists of the following steps:

1. Extract the Onsignt NOW installation package (.Zip) that contains the main deployment bicep scripts. These scripts include infrastructure as code and a Readme .md file.



Tip: For detailed instructions and installation options, including Git Bash on Windows environments, please refer to the Readme .md. Please refer to the Networking .md file for advanced networking scenarios and installation options.

2. Install any optional modules, which include:
 - a. Assigning an organization prefix as a required parameter.
 - b. Designating a location, such as US Gov Virginia.
 - c. Including communication service options.
3. Perform the shared deployment scripts, which include:
 - a. Deploying manual operations.
 - b. The main deployment for a complete infrastructure.
 - c. Deploying artifacts.
 - d. Validating and verifying the deployment.

3.1. ReadMe Prerequisites, Setup & Deployment Parameters

3.1.1. Prerequisites

Within the installation package, open the README .md file. It contains the most up-to-date prerequisites, optional modules, setup, and deployment instructions.

If you are using the Windows Subsystem for Linux (WSL), please refer to the following [Windows Subsystem for Linux \(on page 9\)](#).

If you are using Git Bash, please refer to the following [Git Bash \(via Visual Studio Code\) \(on page 10\)](#).

3.1.2. Windows Subsystem for Linux

To install Onsignt NOW in your Azure subscription, you must have the following setup on your machine (assuming it is running Windows):

1. Download and install the [Windows Subsystem for Linux \(WSL\)](#).
2. Open a WSL shell.
3. Download and install [Azure Command Line Interface \(CLI\) for Linux](#). Run the following command:

```
curl -sL https://aka.ms/InstallAzureCLIDeb | sudo bash
```

4. Close, then reopen your [WSL](#) shell.
5. Download and install the [Azure CLI rdbms-connect extension](#). Run the following command:

```
az extension add --name rdbms-connect
```

6. Download and install the [JSON Query](#) language. Run the following command:

```
sudo apt-get install jq
```

7. Follow the rest of the instructions in [Git Bash \(via Visual Studio Code\) \(on page 10\)](#)

3.1.3. Git Bash (via Visual Studio Code)

To install Onsight NOW in your Azure subscription, you must have the following setup on your machine for Git Bash via Visual Studio (VS) Code:

1. Download and install [Azure CLI for Windows](#)
2. Download and install [JSON Query](#). Run the following command:

```
mkdir -p $HOMEPATH/bin followed by:
```

```
curl -L -o $HOMEPATH/bin/jq.exe https://github.com/stedolan/jq/releases/latest/download/jq-win64.exe
```

3. Download and install the [Azure CLI rdbms-connect extension](#) version 1.0.3 due to a bug in 1.0.4 (latest version) by running the following commands:

```
a. az extension remove --name rdbms-connect
```

```
b. az extension add --name rdbms-connect --version 1.0.3
```

4. Follow the rest of the instructions in [Setup Continued \(on page 10\)](#)

3.1.4. Setup Continued

To continue with an Onsight NOW installation, follow these instructions:

1. To point your [Azure CLI](#) to your desired Azure Cloud, follow these steps:
 - If deploying on **Azure Public Cloud**, run the command: `az cloud set --name AzureCloud`.
 - If deploying on **Azure Government Cloud**, run the command: `az cloud set --name AzureUSGovernment`.
2. Log in to your Azure Subscription by running the following command:

```
az login
```



Note: After logging in to [WSL](#), the `az login` command will display a JSON list of your available Azure subscriptions.

- Each subscription will have two properties: `cloudName` and `name`.
- The `name` property is your **Subscription name**, which you will use within commands for the [How to Deploy Onsight NOW \(on page 18\)](#) section.



Tip: Whoever is deploying Onsight NOW must have sufficient user roles and permissions within the target Azure Subscription:

- User Access Administrator
- Contributor



Important: After deployment, an Application Administrator with [permission to grant administrator consent for enterprise applications](#) is required to allow your organization to log in to Onsight NOW.

3.1.5. Setup

In `parameterFiles/configurable.parameters.json` several parameters must be defined. These values must be set:

```
{
  "parameters": {
    "org": {
      "value": ""
    },
    "location": {
      "value": ""
    },
    "webAppSslCertificateSecretName": {
      "value": "onsightnow-webapp-ssl-cert"
    },
    "webAppFqdn": {
      "value": ""
    },
    "webAppStorageAccountSecretUri": {
      "value": ""
    },
    "deploymentScriptStorageAccountInfo": {
      "value": {
        "storageAccountName": "",
        "storageAccountKey": ""
      }
    },
    "additionalTags": {
      "value": {}
    },
    "searchServiceApiSuffix": {
      "value": "search.azure.us"
    }
  }
}
```

The setup instructions include:

1. Setting a value for the **Organization prefix**. The prefix for all resources and resource groups is determined by the `org` value, which must be between one and six characters inclusive. For example, Librestream uses `ls` as its organization prefix value.



Tip: The `org` must be lowercase and contain only alphanumeric characters.

2. Set a value for the `location` of your Azure region.



Tip: This is the Azure region where you want to deploy Onsignt NOW. To display a list of available regions for your Azure Subscription, run the following command: `'az account list-locations -o table'`. Next, modify the `location` **value** to your desired area using the region's `Name` property, which must be in lowercase characters. For example, Librestream uses `eastus`.

3. Assign an optional **Application Gateway** module by setting a value for `webAppSslCertificateSecretName`.



Note: After deploying the ``shared`` stage, you must upload a valid [Secure Sockets Layer \(SSL\)](#) certificate to the newly created **Key Vault**. The certificate's name in the Key Vault must match the `webAppSslCertificateSecretName`.

4. If your deployment includes an **Application Gateway**, assign a value for `webAppFqdn`.



Note:

- a. This value will be the fully qualified domain name you use to access the Onsignt NOW web application.
- b. After deploying the ``shared`` stage, you must upload a valid [SSL](#) certificate to the created Key Vault.
- c. The certificate's Common Name or Subject Alternative Name in the **Key Vault** must match `webAppFqdn`.
- d. After deploying the ``main`` stage, you must create a [Domain Name Server \(DNS\)](#), a Record for `webAppFqdn`, pointing to the [Internet Protocol \(IP\)](#) address of the created Application Gateway.

5. If your deployment uses a pre-existing storage account for running a PowerShell script that generates a database user's password in your deployment, set the values for `storageAccountName` and `storageAccountKey` in the `deploymentScriptStorageAccountInfo` object.



Note:

- a. The `storageAccountName` is the name of your pre-existing storage account.
- b. Find the `storageAccountKey` under the `keys` section of the storage account.

6. If your deployment requires pointing the Onsign NOW web application at an existing storage account, set a value for `webAppStorageAccountSecretUri`. This value must be a valid Key Vault secret URI that contains a connection string for an existing storage account. You can choose to add the secret to the Key Vault created in the `shared` deployment stage or use an existing Key Vault.



Note: To deploy to the `artifacts` stage, you must manually give read access to the webapp App Service identity secret if you use an existing Key Vault.

7. If your deployment requires additional tags, you can define them as key-value pairs in the `additionalTags` section. For example:

```
"additionalTags": {  
  "value": {  
    "Tag1Key": "Tag1Value",  
    "Tag2Key": "Tag2Value",  
    ...  
  }  
}
```

8. Set a value for the Azure Cognitive Search service API endpoint suffix using the `searchServiceApiSuffix`. This value will depend on the Azure Cloud you are deploying to. Consult Microsoft Azure documentation for the search suffix appropriate for your Cloud environment. Typical values are:

- AzureUSGovernment: `search.azure.us`
- AzureCloud: `search.windows.net`

3.1.6. Advanced Networking

Network access to resources like the [Azure Key Vault](#) and [My Structured Query Language \(My SQL\)](#) Flexible Server are Public by default. Please refer to the Advanced Networking readme `NETWORKING.md` file if your deployment requires an advanced networking configuration.

3.1.6.1. App Service Environments

You can deploy the Onsign NOW App Service Plans and App Services to an existing [App Service Environment \(ASE\)](#). To do this, you will need to set the following values:

- Set `appServiceEnvironmentId` to the ID of an existing App Service Environment in the same region that Onsign NOW is being deployed to.
- Set `appServicePlanSku` to a valid Isolated [Stock Keeping Unit \(SKU\)](#) for your [Adaptive Server Enterprise \(Systems Applications & Products in Data Processing ASE\)](#). For example, `I1v2`.

3.1.6.2. Key Vault Networking

The **Azure Key Vault** holds secrets such as connection strings, access keys, and passwords required by apps and APIs in Onsign NOW. Access to the secrets is restricted using Role Based Access Control but can be further locked down using networking policies.

Public

1. ****Public**** - By default, access to the Key Vault is open to all networks.
 - `keyVaultPublicNetworkAccess` should remain Enabled
2. ****Public access from Specified Networks**** - Access to the Key Vault can be restricted only to specified [Virtual Network \(VNET\)](#) and [IP](#) addresses by configuring the following parameters:
 - `keyVaultPublicNetworkAccess` should remain Enabled.
 - Set `keyVaultFirewallDefaultAction` to `deny` to reject access to the Key Vault by default.
 - `keyVaultIpRules`- The `artifacts` stage of the deployment requires pulling secrets from the Key Vault to perform database migrations. Add the [IP](#) address of the machine running the deployment as follows.:

```
"keyVaultIpRules": {
  "value": [
    {
      "value": "<your-ip-address>"
    }
  ]
}
```

- `keyVaultVirtualNetworkRules` - If you are deploying to an [ASE](#), you must add the subnet ID of the subnet where the [ASE](#) is deployed. Otherwise, you must add the subnet IDs of the Linux and Windows App Services to grant them access to the Key Vault.



Note: For the App Services to access the Key Vault over the [VNET](#) instead of the public address, the subnet(s) must have the `Microsoft.KeyVault` Service Endpoint enabled.

- `keyVaultVirtualNetworkRules` - If you are deploying to an [ASE](#), you must add the subnet ID of the subnet where the [ASE](#) is deployed. Otherwise, the subnet IDs of the Linux and Windows App Services must be added to grant those services access to the Key Vault.



Note: For the App Services to access the Key Vault over the [VNET](#) instead of the public address, the subnet(s) must have the `Microsoft.KeyVault` Service Endpoint enabled.

```
"keyVaultVirtualNetworkRules": {
  "value": [
    {
      "id": "<id of Linux subnet>",
      "ignoreMissingVnetServiceEndpoint": "false"
    },
    {
      "id": "<id of Windows subnet>",
      "ignoreMissingVnetServiceEndpoint": "false"
    }
  ]
}
```

Private

****Private**** - If you require more security, the Key Vault can be restricted to Private Endpoints only. In this case, the firewall-related settings above will have no effect, and access to the Key Vault will only be allowed via a Private Endpoint. A Private Endpoint on the same [VNET](#) as the Linux and Windows App Services must be created manually after running the `shared` stage. Your client machine needs access to the same [VNET](#) as the Key Vault to perform migrations during the `artifacts` deployment stage. This may require a [VNET](#) Gateway when running the deployment on an on-prem machine.

- Set `keyVaultPublicNetworkAccess` to `Disabled`.

Azure Services

`keyVaultFirewallBypass` will determine whether trusted Microsoft services can access the Key Vault. If you choose to auto-generate the [Authentication Database \(Auth DB\)](#) password, the deployment scripts will need to retrieve the secret during the `main` stage, and you should keep this setting set to `AzureServices`. If you have provided a password for the [Auth DB](#) in the parameters file, you can set this setting to `None`.

3.1.6.3. MySQL Flexible Server Networking

The [MySQL](#) Flexible Server instance holds authorization and tenant information for the Onsignt NOW platform. The app services in the auth resource group require access to the database. Access to the database is restricted using connection strings and passwords stored in the Key Vault but can be further locked down using networking policies.

****Auth DB Admin Password**** - During the `infrastructure` stage, the system will generate a password for the [Auth DB](#) by default. If you prefer to generate your password, or if Key Vault networking restrictions prevent the bicep scripts from later retrieving that secret during the `main` stage, you can choose to provide your own password:

- `authDbAdminPassword` - Leave this blank to auto-generate a password or specify your own.

Public

1. ****Public**** - By default, access to the MySQL Flexible Server is open to all networks.

- `authDbPublicNetworkAccess` should remain `Enabled`
- `authDbFirewallRules` should contain a rule to allow access from ALL networks, similar to the following:

```
"authDbFirewallRules": {
  "value": [
    {
      "name": "firewallRules-AllowAll",
      "startIpAddress": "0.0.0.0",
      "endIpAddress": "255.255.255.255"
    }
  ]
}
```

2. ****Public access from within Azure**** - Access to the MySQL Flexible Server can be restricted to Azure [IP](#) addresses. This will allow Onsignt NOW apps to access the database while disallowing access from outside of Azure. Your client machine will need access to the same [VNET](#) as the MySQL Flexible Server to perform migrations during the `artifacts` deployment stage. This may require a [VNET](#) Gateway when running the deployment from an on-prem machine.

- `authDbPublicNetworkAccess` should remain `Enabled`
- `authDbFirewallRules` should contain rules similar to the following:

```
"authDbFirewallRules": {
  "value": [
    {
      "name": "firewallRules-AllowMyIp",
      "startIpAddress": "<your-ip-address>",
      "endIpAddress": "<your-ip-address>"
    },
    {
      "name": "firewallRules-AllowAllAzureServicesAndResourcesWithinAzureIps",
      "startIpAddress": "0.0.0.0",
      "endIpAddress": "0.0.0.0"
    }
  ]
}
```

Private

****Private**** - If you require more security, you can integrate the MySQL Flexible Server with a [VNET](#). To perform the database migrations during the `artifacts` deployment stage, your client machine will need access to the same [VNET](#). This may require a [VNET](#) Gateway when running the deployment from an on-prem machine:

- `authDbPublicNetworkAccess` should be set to `Disabled`
- `authDbVirtualNetworkSubnetId` should be the ID of a subnet in your [VNET](#) that has been delegated to `Microsoft.DBforMySQL/flexibleServers`
- `authDbPrivateDnsZoneId` should be the ID of a Private DNS Zone linked to your [VNET](#). The DNS name must end with `mysql.database.azure.com` OR `mysql.database.usgovcloudapi.net`, depending on your environment.

3.1.6.4. Redis Cache Networking

The auth service uses the Azure Redis Cache to store temporary session information. Access to the system is controlled through a secure connection string. However, more security measures can be implemented by applying networking policies.

Public

1. ****Public**** - By default, access to the Redis Cache is open to all networks.
 - `redisCachePublicNetworkAccess` should remain `Enabled`.
2. ****Public access from Specified Networks**** - Public access to the Redis Cache can be restricted only to specified [IP](#) addresses. If this setting is enabled, you must configure the Redis Cache with a Private Endpoint to allow access from the auth service. This requires configuring the following parameters:

- `redisCachePublicNetworkAccess` should remain `Enabled`.
- `redisCacheFirewallRules` should contain rules similar to the following:

```
"redisCacheFirewallRules": {
  "value": [
    {
      "name": "firewallRulesAllowMyIp",
      "startIpAddress": "<your-ip-address>",
      "endIpAddress": "<your-ip-address>"
    }
  ]
}
```

Private

****Private**** - If you require more security, the Redis Cache can be restricted to Private Endpoints only. In this case, the firewall-related settings above will have no effect, and access to the Redis Cache will only be allowed via a Private Endpoint. A Private Endpoint on the same [VNET](#) as the Linux and Windows App Services can be created manually after running the `shared` stage, or you can choose to create one during the deployment.

- `redisCachePublicNetworkAccess` should be set to `Disabled`.
- `redisCachePrivateEndpointSubnetId` should be the ID of an existing subnet for the Private Endpoint. If you leave this blank, you must create a Private Endpoint manually after running the `shared` stage.
- `redisCachePrivateDnsZoneId` should be the ID of a Private DNS Zone linked to your [VNET](#). The recommended DNS name is `privatelink.redis.cache.windows.net` or `privatelink.redis.cache.usgovcloudapi.net`, depending on your environment.

3.1.6.5. Azure Cosmos DB for Mongo DB Networking

The chat and knowledge capture [APIs](#) use the [Azure Cosmos Database](#) for [Azure Cognitive Search \(ACS\)](#) to store chat messages, [ACS](#) identities for video calling, and knowledge collections. Access to the database is restricted using connection strings and passwords stored in Key Vault but can be further locked down using networking policies.

Public

1. ****Public**** - By default, access to the [Mongo Database](#) is open to all networks.
 - `mongoDbPublicNetworkAccess` should remain `Enabled`.
2. ****Public access from Specified Networks**** - Access to the [Mongo Database](#) can be restricted only to specified [VNET](#) and [IP](#) addresses. This requires configuring the following parameters:
 - `mongoDbPublicNetworkAccess` should remain `Enabled`.
 - `mongoDbIpRules` - You can add the [IP](#) address of any machine that needs access to the MongoDB here. Also, to enable access through the Azure Portal, add the [IP](#) addresses for your environment specified in [Allow requests from the Azure portal](#).

```
"mongoDbIpRules": {
  "value": [
```

```

    {
      "ipAddressOrRange": "<your-ip-address>"
    }
  ]
}

```

3. `mongoDbVirtualNetworkRules` - If you are deploying to an App Service Environment, you must add the subnet ID of the subnet where the [ASE](#) is deployed. Otherwise, the subnet IDs of the Linux and Windows App Services must be added to give those services access to the Key Vault.



Note: For the App Services to access the MongoDB over the [VNET](#) instead of the public address, the subnet(s) must have the `Microsoft.AzureCosmosDB` Service Endpoint enabled.

```

"mongoDbVirtualNetworkRules": {
  "value": [
    {
      "id": "<id of Linux subnet>",
      "ignoreMissingVnetServiceEndpoint": "false"
    },
    {
      "id": "<id of Windows subnet>",
      "ignoreMissingVnetServiceEndpoint": "false"
    }
  ]
}

```

Private

****Private**** - If you require more security, you can restrict the [Mongo Database](#) to Private Endpoints only. In this case, the firewall-related settings above will have no effect, and access to the Key Vault will only be allowed via a Private Endpoint. A Private Endpoint on the same [VNET](#) as the Linux and Windows App Services must be created manually after running the `shared` stage. Your client machine will need access to the same [VNET](#) as the Key Vault to perform migrations during the `artifacts` deployment stage. This may require a [VNET](#) Gateway when deploying from an on-prem machine.

- `mongoDbPublicNetworkAccess` should be set to `Disabled`.

3.1.6.6. App Service Networking

If the Key Vault, MySQL Flexible Server, Redis Cache, or MongoDB are configured with a Private Endpoint or [VNET](#) integration, the Onsight NOW app services must be integrated with a [VNET](#). If you are deploying the apps to an App Service Environment, it will already be integrated into a [VNET](#), and you can skip this section.

Important: Please know the limitations regarding App Service [[VNET Integration](#)](<https://learn.microsoft.com/en-us/azure/app-service/overview-vnet-integration#limitations>). For example, since a subnet can be used only by a single App Service Plan, the Linux and Windows subnet IDs should refer to different subnets.

- `linuxVirtualNetworkSubnetId` should be the ID of a subnet in your [VNET](#) delegated to `Microsoft.Web/serverFarms`.
- `windowsVirtualNetworkSubnetId` should be the ID of a subnet in your [VNET](#) delegated to `Microsoft.Web/serverFarms`.

If App Services will access the Key Vault over the [VNET](#) instead of the public address, subnets must also have the `Microsoft.KeyVault` Service Endpoint enabled.

3.1.7. Optional Modules

Onsight NOW supports optional modules or functionality you may include in your deployment. The information that follows is an overview of each optional module. If you change the default value for the following options, you must edit the `scripts/modules_to_deploy.sh` file and change the corresponding variable's value from `true` to `false` (or vice versa).

1. **Analytics:** Provides analytics for reports like [Azure Communication Services \(ACS\)](#) calls, chats, and logins.

- Default: `false`
- `modules_to_deploy.sh` variable: `DEPLOY_ANALYTICS_MODULE`

2. **Communication Services:** Includes chat, calling, and MS Teams interoperability. Without this module, all communication services are disabled.
 - Default: `true`
 - `modules_to_deploy.sh` variable: `DEPLOY_COMM_SERVICES_MODULE`
3. **Cognitive Services:** Includes **Computer Vision** and **OCR** functionality when taking photos with the camera.
 - Default: `false`
 - `modules_to_deploy.sh` variable: `DEPLOY_COG_SERVICES_MODULE`
4. **Azure Question and Answer (QnA)s:** Includes all cognitive search and text analytics services required to support the answer feature of **Ask & Search**.
 - Default: `false`
 - `modules_to_deploy.sh` variable: `DEPLOY_QNA_SERVICES_MODULE`
5. **OpenAI:** Includes Azure OpenAI functionality, including model deployment for text embedding and completions. Open AI may not be available in all environments
 - Default: `false`
 - `modules_to_deploy.sh` variable: `DEPLOY_OPENAI_MODULE`
6. **Industrial Digital Assistant (Ida):** Includes functionality to support the OpenAI module.
 - Default: `false`
 - `modules_to_deploy.sh` variable: `DEPLOY_IDA_MODULE`
7. **Application Gateway:** Provides web traffic load balancing **SSL** termination, and it hosts Onsignt NOW behind a custom **DNS** with a **SSL** certificate. Without this component, the web app will be accessible at its default Azure App Service endpoint.
 - Default: `false`
 - `modules_to_deploy.sh` variable: `DEPLOY_APP_GATEWAY_MODULE`
8. **App Registration:** Required for authentication and authorization of Onsignt NOW users. If you disable this module, you must create an App Registration manually and fill in the ``appRegistration`` section in ``onsightnow.artifacts.generated.json`` before deploying the ``artifacts`` stage.
 - Default: `true`
 - `modules_to_deploy.sh` variable: `DEPLOY_APP_REGISTRATION_MODULE`

3.1.8. Application Registration

If you choose not to deploy the **App Registration** module, you must create your own. For information on the requirements for creating your App Registration, please [Contact Support \(on page 25\)](#) for more details.

To supply the details of your created App Registration to the scripts, fill in the ``appRegistration`` section of `onsightnow.artifacts.generated.json` after deploying the ``main`` stage and before deploying the ``artifacts`` stage.

```
"appRegistration": {  
  "authority": "",  
  "clientId": "",  
  "clientSecret": "",  
  "graphApi": "",  
  "activeDirectory": ""  
}
```

- `authority` - Should be <https://login.microsoftonline.com/organizations/v2.0> for Azure public cloud, or <https://login.microsoftonline.us/organizations/v2.0> for Azure Government cloud.
- `clientId` - The Client ID of your App Registration.

- `clientSecret` - The Client secret for your App Registration.
- `graphApi` - Should be <https://login.microsoftonline.com> for Azure public cloud, or <https://login.microsoftonline.us> for Azure Government cloud.
- `activeDirectory` - Should be <https://graph.microsoft.com/> for Azure public cloud, or <https://graph.microsoft.us/> for Azure Government cloud.

3.1.9. How to Deploy Onsignt NOW

 **Important:** In the following commands, replace `"YourSubscriptionName"` with the name of your subscription from the prerequisites section. If your subscription name is more than one word, you **must** keep the quotes around the subscription name in the following commands.

Logging verbosity can be specified by adding a `--verbose` flag to the end of the below commands (e.g., `./deploy_onsightnow.sh "YourSubscriptionName" shared --verbose`).

 **Tip:** You should only enable Verbose logging for deployment scripts. Currently, the [Azure CLI](#) does not support verbosity logging in bicep scripts. You can locate them in the `Deployments` section of the resource groups.

Use the following command line parameters to deploy Onsignt NOW:

1. Run `./deploy_onsightnow.sh "YourSubscriptionName" shared`.
2. Take any appropriate action displayed in the console output once the above script completes.
3. Run `./deploy_onsightnow.sh "YourSubscriptionName" main`.
4. Take any appropriate action displayed in the console output once the above script completes.
5. Run `./deploy_onsightnow.sh "YourSubscriptionName" artifacts`.
6. Once the deployment is successful, the system sends you a link to access the new Onsignt NOW portal.



Note: When logging in for the first time, you must grant admin consent for the "Onsignt NOW" App Registration in your Azure Subscription.

Notes

1. Errors will appear if you delete all resource groups for your deployment and try to redeploy with the same organization prefix. These errors occur because the soft-delete feature is automatically enabled for all App Configuration stores in the standard tier. When a standard tier App Configuration store is deleted, its name is reserved for the entire retention period.
2. To recreate a store with the same name before the retention period expires, you must first purge the soft-deleted store unless the store has purge protection enabled. If purge protection is enabled, you must wait for the retention period to pass. For more information, please refer to [Why can't I create an App Configuration store with the same name as one that I just deleted?](#)

3.2. Implementing Question Answering

Question Answering is part of the **Ask & Search** service. Ask & Search enables users to search Email, Contacts, SharePoint, and Answers. To implement Question Answering options, you will need to:

1. Sign in to **Azure Language Studio**: Use your Azure account credentials to sign in to the Azure Language Studio. Select from one of the following options:

- **Azure Government Cloud:**

<https://language.cognitive.azure.us/>

- **Azure Public Cloud:**

Language Studio - Microsoft Azure

- If this is your first time logging in, a dialog box displays that lets you choose a language resource. Select a **Language resource** option from the drop-down menu for an Onsign NOW deployment.

Choose a language resource

Switching your language resource will also switch to your projects. You can switch back at any time. [Learn more about resources in Azure.](#)

Azure directory

Microsoft

Note: To switch to another directory, use the top right user avatar.

Azure subscription *

Select azure subscription ...

Language resource *

Select a language resource ...

[Create a new language resource](#)

Done

Cancel

Figure 3-1 Choose a Language Resource

- Create a new custom project and ensure the name is *"question-answering"*.
 - Click the **Create new** drop-down menu and select **Custom question answering** from the list that appears.
 - Enter *"question-answering"* within the **Name** field.
 - Click **Next** to continue and click **Create Project**.

Azure AI | Language Studio

Language Studio

Welcome to Language Studio

Recent custom projects you've worked on

You don't have any recent projects yet. Start with one of the custom capabilities to create a new project. The list of capabilities is on the left.

Create new

Conversational language understanding

Build natural language into apps, bots, and IoT devices.

Orchestration workflow

Connect and orchestrate CLI, Custom question answering & LUIS projects, and conversational language.

Custom question answering

Customize the list of questions and answers extracted from your content...

Custom text classification

Train a classification model to classify text using your own data.

Custom named entity recognition

Train an extraction model to identify your domain categories using your own data.

Custom conversation summarization

Train a summarization model to create or generate summaries of conversations.

Custom abstractive summarization

Train a summarization model to create or generate summaries of documents.

Post call transcription analytics

Batch transcribe call center extract valuable information, Personal Identifiable Information (PII), sentiment, and call summary.

Document translation

Batch translate documents into one or more languages either from local storage or Azure Blob Storage.

Create a project

Choose language setting

Enter basic information

Review and finish

Enter basic information

Enter the basic information for your custom question answering knowledge base such as name and description.

To change your resource go to [Settings](#)

Azure search resource

ls-gan-eastus-onsightnow-qna-srchsvc

To change your resource go to [Azure Search](#)

Name *

question-answering

Description

Type project description

Source language *

English

Default answer when no answer is returned *

No answer found

Back

Next

Create project

Cancel

Figure 3-2 Create a New Project

4. **Add Source Data:** Locate the section or option for adding source data to your project.

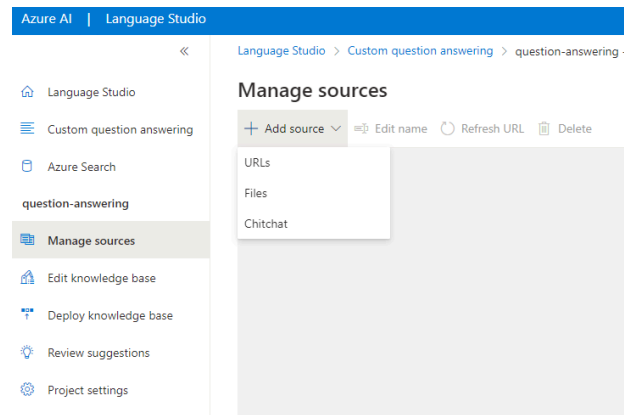


Figure 3-3 Manage Sources

5. **Deploy the Project:** Once you have added your source data, you need to deploy your project. Locate the deployment or publishing option and ensure that the deployment name is set to **production**, which is the default setting. Then, deploy your project.

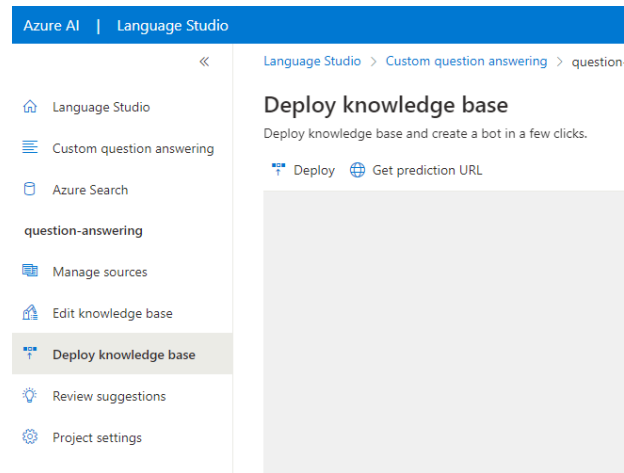


Figure 3-4 Deploy a Knowledge Base

Related information

[Official Microsoft documentation — What is question answering? - Azure Cognitive Services | Microsoft Learn.](#)

3.3. Validating an Onsight NOW Deployment

Typically, you can validate an Onsight NOW deployment by logging in and calling a contact.

1. Launch a web browser (Chrome, Firefox, or MS Edge) and enter the “webAppFqdn” value as the fully qualified domain name within the URL field. The Onsight NOW login screen appears.

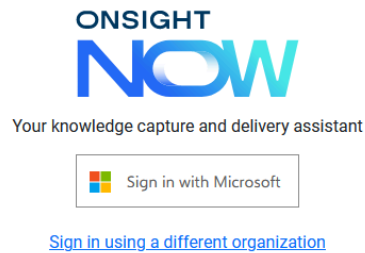


Figure 3-5 Onsight NOW Login

2. Click the **Sign in with Microsoft** button. The Welcome screen appears.

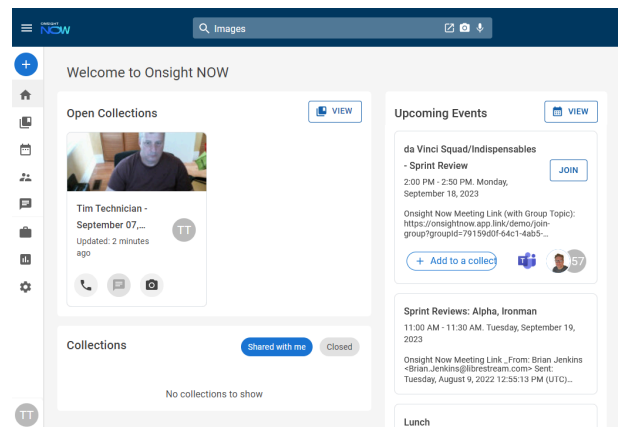


Figure 3-6 Welcome Screen

3. Click the **Menu**  icon in the top-left corner of the screen to access the **Navigation** bar.

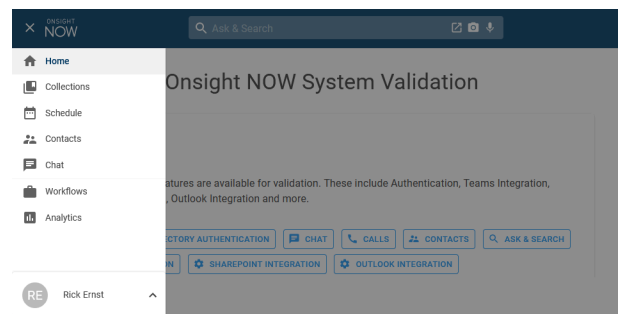


Figure 3-7 Application Bar

4. Click **Contacts**  to display your contact list. Then click the **Close** (X) icon in the top-left corner to collapse the application bar.

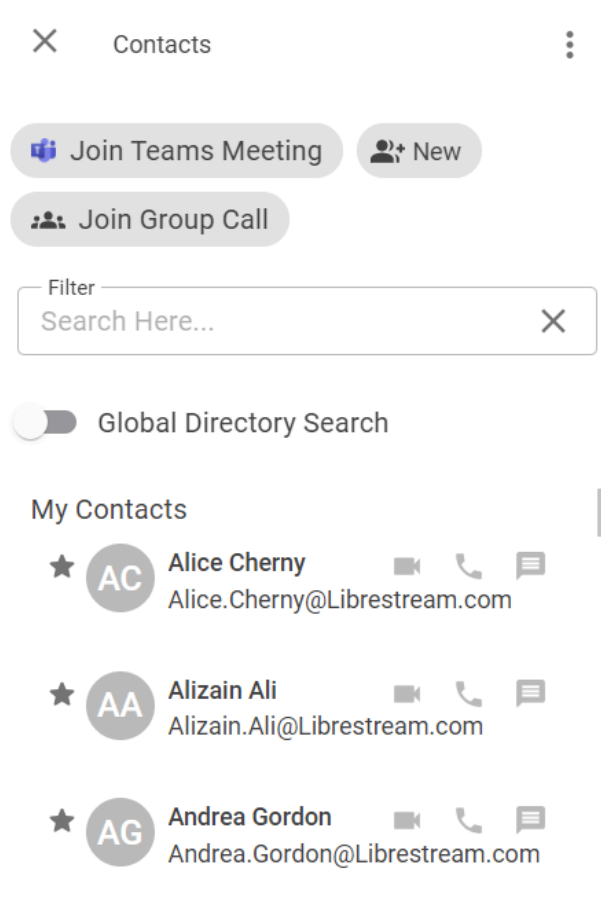


Figure 3-8 Contact List

5. Locate a name within the contact list and click the **Video**  icon to make a video call or click the **Phone**  icon to make an audio call. A window appears that says, Calling...

Calling...

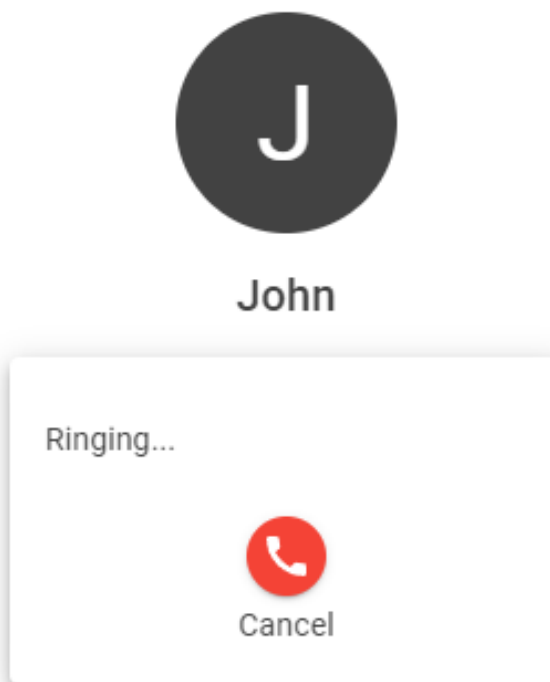


Figure 3-9 Calling

6. The contact receives a message that says, Incoming Call....
 - a. Click **Answer** to accept the call.
 - b. If a custom message appears during the login process, prompting you to agree to the terms and conditions, you must click the **OK** button to indicate your compliance and proceed.
 - c. When prompted to allow access to your microphone, camera, device location, or other permissions, click the **OK, Allow**, or **Yes** button as needed.
7. When a call is active, the Audio and Video controls appear at the bottom of the screen.

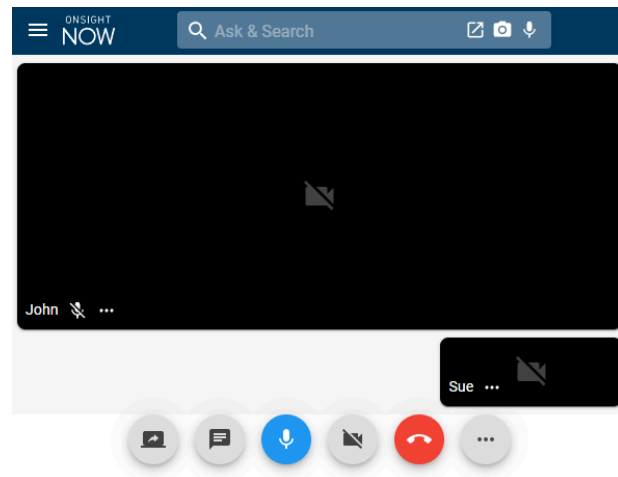


Figure 3-10 Active Call

8. Toggle your **Video** camera **On**  or **Off** , as necessary. This completes the procedure.

Appendices

Contact Support

For Support inquiries:

- **Email:** support@librestream.com
- **Web:** <https://librestream.com/contact-us-support/>
- **Phone:** 1.800.849.5507 or +1.204.487.0612



Figure 4-1 Contact Support QR Code

Glossary

Adaptive Server Enterprise

Adaptive Server Enterprise (*Systems Applications and Products in Data Processing (SAP)* ASE) is a relational model database server developed by Sybase Corporation that was incorporated into *SAP*.

Adaptive Server Enterprise (*SAP* ASE)

(SAP ASE)

Application Insights

Application Insights extends Azure Monitor capabilities by providing Application Performance Monitoring (APM) capabilities.

Application Programming Interface

An Application Programming Interface (API) represents a set of rules that define how applications and devices can connect and communicate with each other.

Application Programming Interface (API)

API

Artificial Intelligence

Artificial Intelligence (AI) is intelligence demonstrated by machines, unlike the natural intelligence displayed by humans and animals, which involves consciousness and emotionality.

Artificial Intelligence (AI)

AI

Authentication Database

An Authentication Database (Auth DB) represents an index of known users and provides a process that authenticates client requests against the index.

Authentication Database (Auth DB)

Auth DB

Authentication Server Service

The Authentication Server app service manages processes that authenticate user credentials and passwords during login using a *MySQL* Flexible Server database (DB) to grant access to a network, application, or system.

Azure

Microsoft Azure (on page 30)

Azure Active Directory

Azure Active Directory (AAD) was Microsoft's cloud-based *IAM* solution that manages authentication and authorization services across an enterprise. It was renamed to *Microsoft Entra ID*.

Azure Active Directory (AAD)

AAD

Microsoft Entra ID (on page 30)

Azure Application Gateway

Azure Application Gateway enables an organization to transfer data to the cloud for archival, disaster recovery, and data processing.

Azure App Service Environment

The Azure App Service Environment (ASE) is

App Service Environment (ASE)

ASE

Azure Cognitive Search

Azure Cognitive Search (ACS) engine — Enables Onsign NOW applications and [AI](#) cognitive services to retrieve answers from user-owned content. User-owned refers to an organization's catalog of proprietary content, including applications and data.

Azure Cognitive Search (ACS)

ACS

Azure Cognitive Services

Azure Cognitive Services (ACS) provides cloud-based [AI](#) services that utilize [APIs](#) to enable developers to build machine learning, logical reasoning, comprehension, and advanced decision-making into applications.

Azure Communication Services

Azure Communication Services (ACS) represent cloud-based services that utilize REST [APIs](#) and client library Software Development Kits (SDKs) to integrate voice, video, chat, and Short Message Service (SMS) across all of your applications.

Azure Communication Services (ACS)

ACS

Azure Computer Vision

Azure Computer Vision enables Onsign applications to analyze images using features that can recognize text, tag images, extract text using Optical Character Recognition (OCR), detect faces, and perform facial recognition.

Azure Cosmos Database

Microsoft's Azure Cosmos Database (Db) is a multi-model, globally distributed, cost-effective, and responsive database service that can scale with your applications.

Azure Government Cloud

Azure Government Cloud (GC) provides a shared cloud computing service environment specifically designed to meet compliance and security requirements for the United States government.

Azure Government Cloud (GC)

Azure GC

Azure Key Vault

Azure Key Vault is a cloud-based service that protects cryptographic keys, passwords, certificates, and secrets, typically including connection strings and passwords.

Azure Language Service

Azure Language Services enables Onsite NOW applications to provide [Natural Language Processing \(NLP\)](#) capabilities that display real-time translated captions during a call and when playing back a recording. [NLP](#) also includes identifying keywords and phrases, summarizing text, and analyzing sentiment.

Azure Monitor

Microsoft's Azure Monitor is an effective monitoring service that collects and analyzes data and assists with identifying issues affecting applications and their resources.

Azure Question & Answer Service

The Azure Question and Answer (QnA) service is a cloud-based Natural Language Processing service that is part of the Azure Cognitive Services solution. It enables users to train a bot to respond to natural language queries, identify key terms and phrases and provides a conversational layer above their data.

Azure Question and Answer (QnA)

QnA

Azure Redis Cache

Azure Cache for [REmote Dictionary Server \(Redis\)](#) is a service that provides an in-memory data store based on the Redis software.

Azure Resource Group

An Azure Resource Group (RG) is a container that stores related resources managed as a group. Administrators use resource groups to apply access control, manage and assign policies, roles, and lock resources.

Resource Group (RG)

RG

Chat API

Chat is a Restful [API](#) service that provides the back-end infrastructure for embedding real-time messaging services within the Onsite NOW application.

Command Line Interface

A Command Line Interface (CLI) is a text-based editing environment that is text-based and can run programs, manage computer files, and execute tasks.

Command Line Interface (CLI)

CLI

Domain Name Server

A Domain Name Server (DNS) translates a computer's hostname into a unique [IP](#) address.

Domain Name Server (DNS)

DNS

Event Grid Topic

An Event Grid is a service that helps organizations manage events across many Azure services and applications. It's fully managed, highly scalable, and easy to use. An Event Grid Topic is an endpoint for all events sent from different sources. It classifies events and determines whether there will be one or more topics. A topic represents a group of related events.

Industrial Digital Assistant

Industrial Digital Assistant (Ida) is a chatbot that uses captured and delivered knowledge to provide customized and personalized assistance. Ida is highly advanced and utilizes [AI](#) to surface relevant answers as text from the user's chat history by providing suggested responses.

Industrial Digital Assistant (Ida)

Ida

Identity and Access Management

Identity and Access Management (IAM) is a web service that enables organizations to manage user identities and access permissions for critical information within a computer network.

Identity Access Management (IAM)

IAM

Internet Protocol

Internet Protocol (IP) represents a unique string of characters that identifies each device on a network using an Internet Protocol address.

Internet Protocol (IP)

IP

Internet of Things

The Internet of Things describes the network of physical objects (things) embedded with sensors, software, and other technologies to connect and exchange data with other devices and systems over the internet.

Internet of Things (IoT)

IoT

JavaScript Object Notation

JavaScript Object Notation (JSON) is a lightweight open-source structured data file format that is text-based, supports data interchange, is human-readable, and can store and transmit data objects.

JavaScript Object Notation (JSON)

JSON

JSON Query

[JSON \(on page 30\)](#) Query (JQ) is a lightweight flexible, command line interface that can reference elements stored in JSON files. JQ can slice, filter, and transform elements within the JSON file.

JSON Query (JQ)

JQ

Linux App Service Plan

The Linux App Service Plan (ASP) provides a subscription model for hosting apps on Azure. This platform enables the hosting of multiple applications on a single server without requiring payment for each app. Deployment can be accomplished using the Azure Command Line Interface (CLI).

Linux App Service Plan (ASP)

Linux ASP

Microsoft Azure

Azure is a cloud computing service created by Microsoft for building, testing, deploying, and managing applications and services through Microsoft-managed data centers.

Mongo Database

Mongo Database (Db) is a flexible, non-relational document database that stores unstructured data within JavaScript Object Notation (JSON) format, including full indexing support, replication, and easy-to-use [APIs](#).

Microsoft Entra ID

Microsoft Entra Verified ID is Microsoft's cloud-based [IAM](#) solution that manages authentication and authorization services across an enterprise. It replaces Azure Active Directory (AAD).

Microsoft Entra ID

[Azure Active Directory \(on page 26\)](#)

Multi-factor Authentication

Multi-factor Authentication (MFA) is a multi-step process that requires a user to provide two or more pieces of identity information to validate their identity.

Multi-factor Authentication (MFA)

MFA

My Structured Query Language

My Structured Query Language (My SQL) Database (DB) is an open-source relational database management system that uses Structured Query Language (SQL). MySQL organizes information into one or more data tables, where data types can be related to one another. SQL is used to store, modify, extract and delete data in an organized fashion.

My Structured Query Language (My SQL)

MySQL

Natural Language Processing

Natural Language Processing (NLP) is a service option for Onsite Connect that provides real-time translated captions in the Viewer during a call or the playback of recordings.

Natural Language Processing (NLP)

NLP

Office 365 Government Community Cloud

Office 365 Government Community Cloud (GCC) provides a shared cloud computing service environment specifically designed to meet compliance and security requirements for government customers using Microsoft's Office 365 productivity suite.

Office 365 Government Community Cloud (GCC)

Office 365 GCC

OpenAI

OpenAI is a non-profit company that conducts research in the field of artificial intelligence. They have developed a collection of open source [Restful Application Programming Interface \(REST API\)](#)s which allow software engineers to build solutions powered by AI.

Open Artificial Intelligence (OpenAI)

OpenAI

Optical Character Recognition

Optical Character Recognition (OCR) is the process of converting a digital image containing printed characters into a machine-readable text format, which is then transformed into an electronic document.

Optical Character Recognition (OCR)

OCR

Operating System

The Operating System (OS) is the software that supports a device's basic functions.

Operating System (OS)

OS

Platform as a Service

Platform As a Service (PaaS) provides a complete cloud platform, including hardware, software, and infrastructure for developing, running, and managing applications.

Platform as a Service (PaaS)

PaaS

Public Internet Protocol

A Public [IP](#) is a version 4 address reachable online.

Public Internet Protocol (IP)

Public IP

Redis

REmoteDictionary Server (Redis) is an open-source in-memory data store. Developers use it as a non-relational database, application cache, streaming engine, and message broker. Its main purpose is to store metadata about user's profiles, histories, and authentication token to improve streaming content to both mobile and desktop users.

REmote Dictionary Server (Redis)

Redis

Restful Application Programming Interface

The Restful Application Programming Interface (REST API) is a programming interface that uses the REST design pattern as a web-based interface to various services.

Restful Application Programming Interface (REST API)

REST API

Secure Sockets Layer

Secure Sockets Layer (SSL) enables a secure internet connection and safeguards sensitive information transmitted between two systems. SSL provides encryption and server authentication over the internet.

Secure Sockets Layer (SSL)

SSL

Software as a Service

Software as a Service (SaaS) is a cloud-based solution that enables end users to access software applications over the internet using a subscription service.

Software as a Service (SaaS)

SaaS

Software Development Kit

A Software Development Kit (SDK) is a package that includes all the necessary software development tools for third-party developers to write applications for a specific platform or programming language.

Software Development Kit (SDK)

SDK

Stock Keeping Unit

A Stock Keeping Unit (SKU) represents an eight digit number that retailers use to track product inventory

Stock Keeping Unit (SKU)

SKU

Systems Applications & Products in Data Processing

Systems Applications and Products in Data Processing (SAP) is the definitive standard for Enterprise Resource Planning (ERP) software applications. SAP which also represents the company name, includes fully integrated modules that cover every aspect for managing business operations and customer relationships.

Systems Applications and Products in Data Processing (SAP)

SAP

Windows Subsystem for Linux

Windows Subsystem for Linux (WSL) is a Windows feature that enables developers to run a Linux environment within Windows without needing a virtual machine.

Windows Subsystem for Linux (WSL)

WSL

Virtual Network

A Virtual Network (VNET) is a networking system in the cloud that works similarly to a physical network by combining all hardware, software, and network resources into one optimized administrative unit.

Virtual Network (VNET)

VNET

Index

Special Characters

.Zip 9

A

Access Administrator 10
Adaptable Programmable Interfaces 5
Additional Tags 11
Admin Consent 10
Advanced Networking 12
Advanced Networking Configuration 12
Analytics 16
APIs 5, 7
App Configuration API service 7
App Registration 16
App Registration module 17
Application Gateway 11
Application Registration 17
Applications 7
Artifacts Stage 17
Ask & Search 5, 18
Authentication Server 7, 7
Azure 10, 16
Azure App Service Endpoint 16
Azure Cloud 10
Azure Cognitive services 7
Azure Command Line Interface (CLI) 9, 10
Azure Commercial Infrastructure 5
Azure Computer Vision 5
Azure Government Cloud 5, 5, 10, 18
Azure Key Vault 12
Azure Language Studio 18
Azure Public Cloud 5, 10, 18
Azure Region 11
Azure Subscription 10, 10, 11

B

Back-end 7
Bicep Scripts 9

C

Capture Knowledge 5
Chat API 7
Chrome 21
CLI 5, 10
Cloud Name 10
Collaboration 5
Command Line Interface 5, 10
Command Line Parameters 10
Communication Services 16
Complete Infrastructure 9
Computer Vision 16
configurable.parameters.json 11
Contact Support 25
Contact Support QR Code 25
Contacts 21
Contributor 10
Custom Question Answering 18

D

Deliver Knowledge 5
Deploy 10
Deploy Project 18
Deploying 17
Deploying Artifacts 9
Deployment 9, 10, 11, 12, 16

Deployment Instructions 9
Deployment Process 9
Designating a Location 9
Domain Name Server 11, 16

E

External 5

F

Firefox 21
Functionality 16

G

Git Bash 9, 10
Government Implementation 7

I

IAM 5
Identity and Access Management platform 5
Information Sources 5
Infrastructure as Code 9
Installation Package 9, 9
Integrations 5
Internal 5
Internet of Things 5
IoT 5

J

JSON Query language 9

K

Key Vault 11
Knowledge Capture 5
Knowledge Capture API 7

L

Language Resource 18
Librestream Cloud 5
Linux 5, 7
Linux App Service Plan 7
location 11

M

Main Deployment 9
Main Deployment Scripts 9
Manage Sources 18
Microsoft 5
Microsoft Entra ID 5
Microsoft Outlook 5
Microsoft SharePoint 5
Microsoft Teams 5
Microsoft technologies 5
MS Edge 21
MS Teams 16
Multi-factor Authentication 5
MySQL Flexible Server 12

N

Name 10
NETWORKING.md 12
New Project 18

O

Office 365 Government Community Cloud 5
Onsight Infrastructure Resource Group 7
Onsight NOW 5, 7, 9, 9, 10, 10, 11
OpenAI 16
Optical Character Recognition 5
Optional 9
Optional Modules 9, 16

Org Value 11
Organization Prefix 9, 11

P

PaaS 5
Parameters 11
Platform as a Service 5
Powershell Script 11
Prerequisites 9
Public 12

Q

Question and Answer Services 16
Question Answering 18

R

Readme 9
Requirements 17
Resource Groups 7

S

Services 7
Setup 9, 9
Shared Deployment Scripts 9
Sign in with Microsoft 21
Single Sign-on 5
Software as a Service (SaaS) 5
SSL Certificate 11
storageAccountKey 11
storageAccountName 11
Subscription 5, 10

U

US Gov Virginia 9

V

Validating the Deployment 9
Verifying the Deployment 9
Video Call 21
Video Camera 21
Visual Studio Code 9, 10
VS 9, 10

W

Web Application 7
webAppFqdn 11, 21
Windows 7
Windows App Service Plan 7
Windows Subsystem for Linux 5
Windows Subsystem for Linux (WSL) 9, 9