

Honeywell

VoiceConsole

Cloud Deployment

Product Description

Disclaimer

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Patents

For patent information, please refer to www.hsmpats.com.

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CUSTOMER SUPPORT

Technical Assistance

If you need assistance installing or troubleshooting your device, please contact us by using one of the methods below:

Find most Honeywell Voice technical documentation online at www.help.honeywellaidc.com.

Honeywell - Reseller Services

If you purchased equipment or services through a reseller, please contact your reseller first for support or to purchase a support plan.

Honeywell - Technical Support

Submit incidents or questions to www.honeywell.custhelp.com or contact Honeywell Technical Support Center:

United States:

E-mail: VoiceTechnicalSupport@Honeywell.com

Phone: 866 862 7877

Americas (outside U.S.), Australia, New Zealand:

E-mail: VoiceTechnicalSupport@Honeywell.com

Phone: 412 829 8145, Option 3, Option 1

Europe, Middle East, and Africa:

E-mail: VoiceTechnicalSupport@Honeywell.com

Phone: +44 (0) 1344 65 6123

Japan and Korea:

E-mail: vocollectJapan@honeywell.com

Phone: +813 3769 5601

Honeywell Customer Service

Contact Honeywell Customer Service for order placement, order status, returns, Return Material Authorization (RMA) status, or other customer service issues:

United States:

E-mail: VoiceCustomerServiceAmericas@Honeywell.com

Phone: 866 862 6553, Option 3, Option 2

Americas (outside U.S.), Australia, New Zealand:

E-mail: VoiceCustomerServiceAmericas@Honeywell.com

Phone: 412 829 8145, Option 3, Option 2

Europe, Middle East, and Africa:

E-mail: vocollectCSEMEA@honeywell.com

Phone: +44 (0) 1344 65 6123

Japan and Korea:

Email: vocollectJapan@honeywell.com

Phone: +813 6730 7234

Honeywell RMA

To return equipment for repair contact Honeywell RMA to request an RMA number.

Email: VoiceRMA@Honeywell.com

Sales and General Inquiries

For sales or any other inquiry, visit www.sps.honeywell.com or call 412 829 8145.

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Honeywell's VoiceConsole® is a web-based tool for managing voice-enabled devices, operators, configuration and system diagnostics.

This document introduces VoiceConsole Cloud Deployment. This new deployment of VoiceConsole is a Software as a Service (SaaS) application maintained by Honeywell.

The previous versions were commonly referred to as VoiceConsole On Prem Deployment. In this deployment, the customer installed and maintained VoiceConsole on a server with a Microsoft Windows or Linux operating system. These earlier versions could be installed in a cloud environment by the user, and beginning with VoiceConsole 5.6 Honeywell officially tested VoiceConsole using Microsoft Azure. VoiceConsole On Prem Deployment is still supported.

This document focuses mainly on information about VoiceConsole Cloud Deployment as well as the differences from VoiceConsole On Prem Deployment.

Benefits of VoiceConsole Cloud Deployment

What are the benefits of moving to VoiceConsole Cloud Deployment? This release is a Software as a Service (SaaS) implementation of VoiceConsole using the familiar VoiceConsole interface.

This means:

- Reduced hardware burden - No need to deploy servers and database machines. Less IT burden.
- Faster ramp up - With the SaaS implementation, only the Honeywell Voice devices need configured. There is no VoiceConsole software for the customer to install and maintain on premises.
- Honeywell maintains the most current version released for VoiceConsole, so that the customer does not need to worry about installing updates. The customer's license includes any VoiceConsole upgrades during the license term.
- Expansion doesn't mean importing new license files as licensing is handled in the cloud.
- Up front cost is reduced for quicker return on investment.
- Integration with Honeywell Operational Intelligence.

Device Support

VoiceConsole Cloud Deployment supports the A700x and Android devices supported by Guided Work. See www.help.honeywellaidc.com/AndroidDevices.html.

Concerns

There may be concerns about using VoiceConsole Cloud Deployment. These topics are addressed in the next sections of this document.

- Is VoiceConsole Cloud Deployment reliable?
- Can VoiceConsole Cloud Deployment handle large deployments?
- Is the data secure?

Communication

While Honeywell communicates important information via the VoiceConsole Cloud Deployment interface, it is important that Honeywell have updated contact information in order to provide notices of system maintenance, planned upgrades, etc.

Please ensure that contact information is updated and that any VoiceConsole Cloud Deployment email messages are not getting caught in your spam filter.

Getting Started

To get started with VoiceConsole Cloud Deployment, contact your Honeywell representative and complete an intake form. You will need information such as:

- Contact information
- Number of devices

Be sure to discuss any bandwidth concerns during the intake process.

When VoiceConsole Cloud Deployment is ready, you will assigned a unique link to your specific VoiceConsole Cloud Deployment instance.

The Import/Export Data and migrate devices features can be used to transition to VoiceConsole Cloud Deployment from an existing VoiceConsole On Prem Deployment installation:

You can use the Export Data function from your existing VoiceConsole On Prem Deployment implementation then use the Import Data function from VoiceConsole Cloud Deployment. To expedite the export/import process:

- The export files can be quite large. Contact Honeywell Technical Support for assistance exporting data from an existing VoiceConsole deployment. Technical Support also assists with importing this data into the VoiceConsole Cloud deployment.
- Plan to create device profiles to connect to the new VoiceConsole Cloud Deployment instance and upload device firmware into VoiceConsole Cloud Deployment.
- If you have questions, contact Honeywell or your partner for assistance during the export process.

For more information please see:

- [Import Data](#)
- [Export Data](#)

SYSTEM ARCHITECTURE

The traditional VoiceConsole On Prem Deployment system architecture (for a single site) looked like this. Honeywell Voice devices connect to a server which is connected to a database.

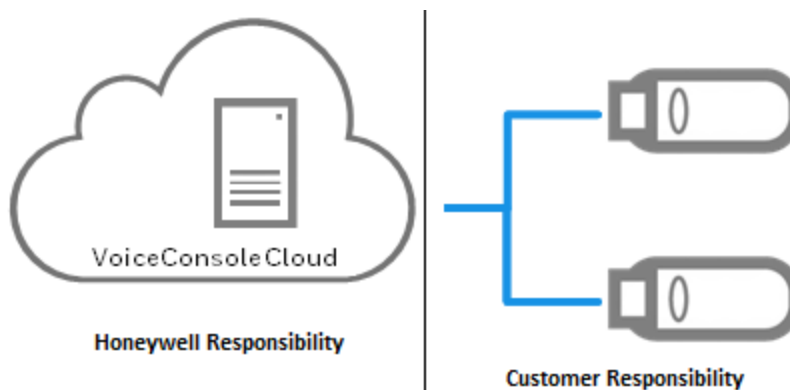


VoiceConsole On Prem Deployment Single Site Architecture

Additional options include multiple sites, clustered servers or clustered databases. The customer could also elect to install their instance of VoiceConsole in a cloud environment.

In all these use cases the customer is responsible for all hardware and software that is part of the VoiceConsole implementation.

With VoiceConsole Cloud Deployment the Honeywell Voice devices interact with the cloud installation of VoiceConsole.



VoiceConsole Cloud Deployment System Architecture

Honeywell maintains the cloud portion of the implementation which includes the server and database as well as the VoiceConsole software. The customer maintains the Talkman devices

and software installed on them. The customer is also responsible for the Wi-Fi network and Internet connection.

System Capacity

VoiceConsole Cloud Deployment is scalable based on the number of licensed devices. Refer to the latest Release Notes for recommended installation size. VoiceConsole Cloud Deployment is deployed in multiple regions to provide system redundancy.

Honeywell Technical Support is trained to assist with diagnosing communication issues and slow downs throughout the implementation:

- Wi-Fi
- Internet
- Web server
- Database

Honeywell provides a list of best practices to improve system performance. The bandwidth requirement information below should be considered when onboarding with VoiceConsole Cloud Deployment. Your Honeywell representative can assist in determining bandwidth needs. Honeywell recommends evaluating your Wi-Fi and Internet connections and their ability to handle peak bandwidth. This bandwidth availability is especially important at shift change or other peak profile load times. Honeywell will work with these same bandwidth requirements for the cloud components (web server and database).

Scalability

Honeywell ensures the resources available within a deployment of VoiceConsole Cloud Deployment meet or exceed the published [server requirements](#). The resources allocated are adjusted as necessary when a customer upgrades their number of licensed devices.

Bandwidth

Total # of Devices Being Managed	Operator Load	Task Package Load	Minimum Recommended Bandwidth
100	0.41 MBps	0.51 MBps	1 MBps
300	1.23 MBps	1.53 MBps	3 MBps
500	2.05 MBps	2.56 MBps	5 MBps
2500	10.25 MBps	12.8 MBps	24 MBps

Minimum Per Device Bandwidth Requirements

Consider the following for the A700x and VoiceConsole Cloud Deployment.

Scenario	Total Data Transfer	Typical Elapsed Time	Bandwidth Required
Start of Shift	0.416 MBps	90 seconds	50 KBps
Profile Load	300 MBps	5 minutes	1 MBps

See minimum required site bandwidth tables below.

File transfers, such as loading a VoiceClient into VoiceConsole or loading a profile onto a device may take longer in a cloud environment than they may take in a local installation.

Minimum Recommended Bandwidth per Site (Start of Shift)

Number of Active Devices	Bandwidth (MBps)
10	1
20	3
30+	5
200	10
300	15

A700x Minimum Recommended Bandwidth per Site (Profile Load)

Number of Active Devices	Bandwidth (MBps)
10	10
20	20
30+	30

Network Bandwidth Calculations

Assumptions and Comments

- Application and/or operator loading is completed within a 5-minute window. This is a highly conservative assumption. In real-world conditions, operator loads are typically staggered over a longer period of time.
- The bandwidth requirements specified are based on the assumption that only 1/5 of the total number of devices in the entire system will concurrently download operators within a five-minute window.
- Application loads are only required when the device application is updated. Operator loads occur at every shift change.
- The network bandwidth requirements are calculated values based on the following assumptions for typical operator and Task Package loads:
 - Typical Operator Load Transfer = 232 KB (1856 Kb) of data per device
 - Typical Task Package Load Transfer = 288 KB (2304 Kb) of data per device
- The Site Bandwidth requirements (SBWR) based on these assumptions can be determined using the following calculation:
 - SBWR Operator Load = (Devices per Site x 1856 Kb) / 300 sec
 - SBWR Application Load = (Devices per Site x 2304 Kb) / 300 sec
- The Central Site Bandwidth Requirements (CSBWR) based on these assumptions can be determined using the following calculation:
 - CSBWR Operator Load = 1/5 x SBWR Operator Load x Number of Sites
 - CSBWR Application Load = 1/5 x SBWR Application Load x Number of Sites

Additional Information

Honeywell's best practices for VoiceConsole should still be followed when using VoiceConsole Cloud Deployment to reduce possible Wi-Fi or Internet congestion. These links provide additional information:

- [Best Practices for Loading Device Profiles](#)
- [Wireless Network Settings](#)
- [Use Schedules to Manage Device Profile Loads](#)

RELIABILITY, PRIVACY, AND SECURITY

Reliability

VoiceConsole Cloud Deployment is deployed on Microsoft Azure infrastructure, including:

- Multiple regions
- Redundancy
- Disaster recovery

Microsoft is committed to Azure reliability and Honeywell typically aims to provide an uptime of 99.99%¹ for VoiceConsole Cloud Deployment.

Honeywell maintains the VoiceConsole Cloud Deployment and provides advance notice of maintenance activity including minor patches and major upgrades. Rollback plans are created should an issue occur with any VoiceConsole Cloud Deployment maintenance activity.

Storage Account Backup and Recovery

VoiceConsole Cloud Deployment uses Zone Redundant Storage (ZRS) to maintain high availability. Data is replicated across the available zones with ZRS. If a zone becomes unavailable for any reason, there is no delay to remount Azure file shares for any connected client.

Data backups of file shares occur regularly. A full backup occurs once per day and that backup is maintained for ten days.

Database Backup and Recovery

VoiceConsole Cloud Deployment uses Azure SQL Platform as a service. This is configured as a Business Critical tier (99.995% uptime) and uses ZRS (see above). This tier model uses a cluster of database engine processes so that there are always available database engine nodes even during maintenance activities.

High availability is achieved by the replication of data between nodes, with each node using an attached SSD for data storage. Failover is set up in another region if a failure should occur in one region.

¹Subject to the [Service Disclaimer](#) on page 15

Database backup includes a short term and long term policy. The short term policy retains a backup every 12 hours and those backups are retained for seven days. Long term backup occur weekly (retained for 12 weeks) and monthly (retained for 3 months).

Monitoring

VoiceConsole Cloud Deployment monitoring is powered by Elastic Observability.

At the application level:

- Each customer instance is monitored via custom health API's exposed by VoiceConsole Cloud Deployment
- Elastic APM (Application Performance Monitoring) is integrated for in-depth application level monitoring and alerting

At the infrastructure level:

SLOs (Service Level Objectives) are defined to monitor critical infrastructure and provide appropriate alerts for.

- AKS (Azure Kubernetes Service) clusters
- Storage account
- Database servers

Report Problems

If Honeywell detects an issue, an investigation is performed and customers are notified. Updates, including resolution notifications, are provided during the process.

If a customer reports an issue, Honeywell investigates and escalates as needed. Any necessary improvements are implemented.

TIP

Make sure that Honeywell has the correct contact information including emails. Also make sure you whitelist VoiceConsole Cloud Deployment email notices so they are not caught in spam/junk filters

Renewals

Honeywell provides a series of notices to the customer before the subscription expires. The notices include renewal quotes for various contract lengths.

Once renewed, Honeywell implements the new license for VoiceConsole Cloud Deployment. For timely renewals there is no interruption in service.

Service Disclaimer

Honeywell is not responsible or liable for any issues, problems, unavailability, delay or security incidents arising from or related to: (i) conditions or events reasonably outside of Honeywell's control; (ii) cyberattack; (iii) the public internet and communications networks; (iv) data, software, hardware, services, telecommunications, infrastructure or networking equipment not provided by Honeywell or acts or omissions of third parties that Customer retains; (v) Customer and its Users negligence or failure to use the latest version or follow published documentation; (vi) modifications or alterations not made by Honeywell; (v) loss or corruption of data; (vi) unauthorized access via Customer's credentials; or (vii) Customer's failure to use commercially reasonable administrative, physical and technical safeguards to protect Customer's systems or data or follow industry-standard security practices.

Data Privacy

No VoiceConsole Cloud Deployment customer will have access to any other customer's data. VoiceConsole Cloud Deployment is a single-tenant implementation so each customer has their own application and database.

Honeywell's privacy policy can be found at : <https://www.honeywell.com/us/en/privacy-statement>.

Submit a privacy request:

<https://honeywellhub.secure.force.com/PrivacyInformationRequestForm>.

Data Collection, Privacy and Use

Honeywell's products, including software may collect information about how, and under what conditions, the Honeywell product/software is used and functions. This information may include, but is not limited to, information regarding user input (such as touch panel, keyboard, and trigger use), power and power management (such as battery level and status and recharge time) docking events, system up and down time, backlighting use, voice/audio capture, information from any sensors (such as location, motion, temperature, and ambient lighting), and use with peripherals. In addition, upon the customer's request and consent, Honeywell may collect recordings depicting speech from Honeywell products. Any such information collected shall be converted to a digitized or a mathematical form, and is collected, in a manner that does not verify the identity of any person, solely for the purpose of performing troubleshooting activities or for improving performance of Honeywell products.

Security

IMPORTANT

Honeywell provides a secure environment for VoiceConsole Cloud Deployment.

Honeywell strongly recommends using the Audit feature built into all deployments of VoiceConsole to monitor for unauthorized access whether using VoiceConsole Cloud Deployment or VoiceConsole On Prem Deployment.

Contact Honeywell Voice Technical Support for information on the PSIRT (Product Security Incident Response Team) process (subject to confidentiality requirements).

Disclaimer

This is an overview of cybersecurity and data privacy measures that have been put in place as part of the Honeywell VoiceConsole Cloud Deployment offering and is not a legally binding cybersecurity or data privacy agreement. Honeywell may update this overview from time to time, with or without notice. Customers are encouraged to frequently check help.honeywellaidc.com for the latest version of this user guide.

Encrypted Transmission

VoiceConsole Cloud Deployment devices communicate with the platform using only encrypted protocols with industry-leading ciphers for encryption. The secured channel ensures that data is protected and cannot be accessed by unauthorized entities as it travels from the devices to the cloud.

Management Console

Each customer is provided a secure link and login information for their instance of VoiceConsole Cloud Deployment, which is secured using a defense-in-depth methodology. This means using multiple layers of defense from active monitoring, encryption using the highest levels of ciphers for data in-motion, in processing, as well as data-at-rest. This ensures a secure channel for data exchange between the Honeywell cloud and the user's device. As Honeywell VoiceConsole Cloud Deployment segregates tenant data logically, each customer can view and interact with only their own data and reports. In other words, dashboards and reports are private to every customer.

Cloud Provider

Honeywell VoiceConsole Cloud Deployment leverages the world's leading cloud infrastructures, such as Microsoft Azure, that provide best-in-class physical and cyber security services. Honeywell continuously endeavors to not only comply with the best cybersecurity practices recommended by our providers but to meet or exceed those industry-leading practices by incorporating cybersecurity measures in the very design of the solution and keeping those measures current with changes in the cybersecurity landscape throughout the offering life cycle. The entire VoiceConsole Cloud Deployment platform including customer-owned data is hosted within the United States, and we will comply with any additional local regulatory requirements during the term of our contractual commitments.

Customers outside of the United States may elect to use VoiceConsole Cloud Deployment if the hosting location and distance are acceptable to them.

All stored data is encrypted at the tenant level using keys that are unique to each organization. All encryption keys are securely stored in a vault solution separate from encrypted data. All customer data is segmented from the Honeywell network and kept in its own production instance. There is no interaction with development systems or infrastructure, which are also kept separate.

Security Considerations for Devices Connecting to VoiceConsole Cloud Deployment

One of the common weaknesses of system management as reported by Open Web Application Security Project (OWASP) is “not keeping software up to date.” It is critical to install the latest patches and software versions on all operating systems that support or connect to components of Honeywell VoiceConsole Cloud Deployment.

Note that Honeywell VoiceConsole Cloud Deployment may require specific versions and/or updates of software. Refer to documentation and release notes.

Honeywell recommends that you establish a level of privilege for all external accounts and enforce a strong password policy.

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