Interactive Voice Response (IVR)

December 22, 2014

1. Rate

2. General Overview

Interactive Voice Response (IVR) is a technology that allows a computer to interact with humans through the use of voice and dual-tone multi-frequency (DTMF) tones input via keypad.

3. Service Description

In telecommunications, IVR allows customers to interact with an agency’s host system via a telephone keypad, after which they can service their own inquiries by following the IVR dialogue. IVR systems can respond with prerecorded or dynamically-generated audio to further direct users on how to proceed. IVR applications can be used to control almost any function where the interface can be broken down into a series of simple interactions.

Call centers use IVR systems to identify and segment callers. The ability to identify customers allows services to be tailored according to the customer profile. For example, the caller can be given the option to wait in the queue and the system can obtain the caller line identification data from the network to help identify or authenticate the caller.

The Computer Telephony Integration (CTI) is a feature of IVR and allows a contact center or organization to gather information about the caller as a means of directing the inquiry to the appropriate agent. CTI can transfer relevant information about the individual customer and the IVR dialogue from the IVR to the agent desktop using a screen-pop, making for a more effective and efficient service.

Specific services included in IVR:

- Use of the centralized hosted infrastructure where all the licensed software runs
- Manufacturer software support
- Restoration of service in the event a disaster makes the primary IVR/Contact Center System unavailable
- System monitoring 24/7
- Routine maintenance tasks both scheduled and on-demand; (server/service resets and other maintenance activities)
- Upgrade and patch management for both major upgrade events and minor patches
- Infrastructure modifications to support IVR growth
- Standard contact center reports
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- Hosting of the IVR in a secure environment
- Storage and backup environment for customer data
- IVR migration & release management oversees, maintains, secures, and enforces the solution/application migration process from the development environment to the production environment. Tasks include:
  - Oversight and promotion of agency solutions
  - Project documentation review & approval
  - Project design review & approval
  - Solution review & approval
  - Configuration migration management
  - Major and minor releases

The service will **NOT** include:
- Application development and system configuration for customers
- Development of call flow
- Development of speech recognition
- External hardware (i.e. desktop PC, telephone sets, headsets, network patch cables)
- Ongoing training for agency staff
- Associated costs for custom reports, custom recordings, agent licenses, individual licenses for telephones, individual licenses for voicemail
- Conversions from existing applications
- Moves, additions, deletions and changes of supervisor/agent configuration, telephone station and/or voicemails
- Future IVR/Call Center enhancements

4. Roles and Responsibilities:

**Voice Team Responsibilities:**

- The Network Services Division within the Office of the CIO provides IVR and call center capabilities to State of Nebraska customers.
- The OCIO voice team will notify clients of downtimes via an Exchange distribution list. Every attempt will be made to give as much notice as possible.
- The OCIO voice team will work with the customer to test changes and requests prior to implementation into the production environment.
The OCIO voice team will respond to JTrac tickets, a generic issue-tracking web application supported by the OCIO Web team. These requests are for assistance in accordance with published severity levels. The OCIO voice team will use the OCIO helpdesk ticket software, GWI, for all supervisor/agent moves, additions, deletions and changes. Once the OCIO Voice Team receives the ticket, it will be assumed that the work has been approved by the agency.

Customer Responsibilities:

- Clients are expected to have a clear understanding of their business processes and the objective they wish to achieve.
- Clients are required to review and approve test results before production implementation.
- Clients will use the OCIO helpdesk ticket software, GWI, for all supervisor/agent moves, additions, deletions and changes.
- Clients are expected to provide a current list of user’s allowed to create J-Trac tickets.
- Clients are expected to promptly contact the Office of the CIO to report any problems. Refer to the customer support and escalation section for details. Provide the following information:
  - Include your name, location, phone number and email address.
  - Provide complete and accurate description of the problem, which may include screen shots of the issue.
  - The agent telephone number
  - The computer name
  - The date/time of the issue
  - The calling party number
  - The dialed telephone number

5. Requesting Service

Contact the OCIO Help Desk (402-471-4636 or cio.help@nebraska.gov) or a member of the Network Services Voice Team.

6. Billing Information:

Billing for the IVR is processed through CSB (Communications System Billing). CSB uses a combination of accounts, job codes and billing numbers for authorizing work and tracking costs for specific activities. The customer may designate which job code and billing number to use. Contact
the Office of the CIO for assistance with developing an accounting structure that meets the needs of your organization.

6. Service Hours, Response Times and Escalation:

The following defines the response time service level commitment of the IT Services Help Desk. This is not necessarily the time to resolve the problem, but rather the maximum amount of time to contact the appropriate support person and respond back to the requestor that the problem is being addressed with an estimated time for resolution.

The IVR system is available 24-hours, 7 days a week. Scheduled service interruptions take place with advanced notice with agencies. On occasions, a short service interruption may be scheduled to address an urgent issue.

Disaster recovery procedures and equipment are in place at an alternate site to facilitate recovery from any incident that renders the primary computing facility inoperable.

Network Services Voice Team members are on-call 24-hours per day, 7 days a week to diagnose and correct emergency problems. Refer to the customer support and escalation section for details. Severity is an evaluation of the situation based on the information received by the person taking the call/request for help.

The four possible values are:

Emergency Level Problem
Response: Immediate. A personal, direct, contact must be made to the person responsible.
Impact: All or most locations are unable to perform their work.

High Level Problem
Response: Within 2 hours
Impact: Frequent, chronic problem. Multiple locations or workgroups are unable to perform their work.

Medium Level Problem
Response: Within 4 hours
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Impact:
Single location or workgroup is unable to perform their work. Service is degraded or restricted.

Low Level Problem

Response:
Within 10 hours

Impact:
No actual function loss

For further information, please contact:

Office of the CIO Help Desk
cio.help@nebraska.gov
402-471-4636 or 800-982-2468