Ohio Data Transfer

THINKING OUTSIDE THE BOX IN CUSTOMER SERVICE

The ODT VISION VRU…. Security, Front and Center

When considering the design of your new self-service voice solution, security requirements may be one of the most important elements. You may not think security is a concern, especially if the application is a simple inquiry system, but it can be absolutely critical if the application is allowing the user to provide information, place orders, or work with sensitive data.

Inside this issue:

User ID & Password

The "golden rule" of any voice system is "Never ask the caller for something they might not know." If you are going to use an account number as the User ID, it is a good idea to allow for other information to allow access as well. *If for example, "Susie House-wife" doesn't know her account number, the VRU may ask for a home phone number and it supplies the account number.* The security pin number also does not have to be a hard to remember number code, but something from the screen which might be used as a cross-reference such as the house number street address or the five-digit zip code associated with the account. Cross Reference fields may be used many times within an application. You may also gather a field value from a database or screen field and

speak it back for verification. As example, in an insurance policy system, after supplying the policy number, the unit may speak back: *This is the policy for "John Smith", Press 1 to accept or any other key to continue with a new policy number. (If "1" is not pressed, the routine will loop back where the policy number is re-entered.)*

The standard used in may applications is the last four digits of the customer's Social Security number but be warned, new privacy laws are requiring the removal of SS numbers from many records including being used as an account number or for use as security verification. This is in reaction to an ever increasing number of identity theft problems.

Privacy becomes paramount if the application is in the medical or financial fields where only that user can access their own private information. It may not be enough to just have the caller sign on with a User ID and Password Pin. Once the caller has been identified with a User ID and successfully

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passed the Security Pin, you may have additional security on the various levels within your general menu. *For example, Menu Item 3 off the General Menu may be for "Remote Payroll Entry" which requires additional information to be supplied in order for a caller to perform this function.*

Physical Security

Since the ODT VISION Voice Response Unit is connected to the public switch phone network one would consider its applications open to the entire world. However, an additional layer of security can be added before the application even requests a User ID and Security Pin by adding callerID tracing. CallerId can be used if your phone network allows CallerID. The ODT VISION can take the information gathered during the rings and compare this callerId to records within a database to see if this user is allowed to use the system. This form of physical security allows only designated users to be able to use either the entire system or subroutines within the VRU routine. The physical security through CallerID may also allow you to do away with the use of a UserID and Security Pin completely. *For example, salesman John Smith can automatically gain access to the system because he calls from a known and secure phone number.* Please keep in mind that the ODT VISION VRU may be connected to the whole outside switched network but access to you LAN, host application screens, or databases is not possible if your script's logic doesn't allow it. The connection to the public phone network is analog in nature which are converted to the digital signal via the dialogic cards within our unit. The touch-tone inputs will only have an

effect if your script logic allows it. This means that even if we build our application over a host screen with a command line, the user doesn't have access to that command line to enter any value. The script may use that command line but the caller cannot enter a value that is not allowed. This explains why banks have been able to use telephony type applications for years in what might be considered one of the most sensitive types of applications possible- interactive information on bank accounts.

Recorded voice signature

Another type of caller security is where your application routine requests the caller to record their name at the beep for a "voice signature". This recorded "wav" file is saved and given a name which is recorded in the log file and associated with the transaction.

Audit Trails

It is very simple to build a log to serve as an audit trail as to who used the system, what applications were performed, date and time stamps, whether the caller exited to a live customer service representative, and any consequential information. Always build a log/audit trail backwards thinking of what information you want in your reports. The design of that log file will result in what variables we need to track. From a security point of view, we want to know who did what and when.

So when designing you future self-service routine, consider what security requirements exist. It will be important to monitor your log and use this audit trial to insure that the system is being used appropriately.◘

Potpourri of Specialized Applications

This month's "Application In the Spotlight" article is the ninth of an ongoing series called, "Potpourri of Specialized Applications." Frequently, a client will install the ODT VISION Voice Response Unit for a specific large application, but its ease-of-use and simple customization will later allow for new functions to be added that provide even greater customer service flexibility. Some of these applications have already been done at our clients' sites and some are in the planning stage.

Open Enrollment

HR and employee benefits has changed over the years and many companies offer insurance coverage which can be customized by the actual employee. ABC Company will spend "X" amount on your insurance premium. Many firms require a co-payment from the employee. The amount of that employee's payment and the various degrees of coverage can be defined by the employee. This individual may want to add/delete types of coverage, change the amount of the deductible, remove family members, add new family members, or a host of other functions. This is a very fluid type of application, but there may be restrictions on when certain elements of the "Open Enrollment" can be changed. In addition, this may be a menu type of selection where only certain values may be allowed.

For example,
Press 1 for $250 family dental deductible
Press 2 for $500 family dental deductible
Press 3 for $750 family dental deductible
Press 4 for $1000 family dental deductible

This application starts like most of our clients' applications where the caller must sign on by identifying themselves and entering the proper security. This user's information must then be verified within the system. There are two type of "Open Enrollment" applications available, the first time enrollee and a current enrollee who just wants to modify an existing profile. It is suggested that the caller is given a preprinted document which outlines the elements of the "Open Enrollment" and values allowed. If the caller selects from the submenu of user types that they are a first time enrollee, the Appropriate questions are asked by the ODT VISION VRU according to the Open Enrollment form. (Instead of menus items which are played, an element's value may be selected in the form of codes numbers which are entered based on the pre-printed selection form. For example, $250 family dental deductible is code "101", $500 is code "102", etc.) If the caller only needs to change a certain item, they enter the item code found on the form and the value which is proper for that element. As mentioned before, some items can only be changed during some "Open Enrollment" periods, but the system can take the new values from the customer whenever they wish and apply them when the policy allows. If this is the case, the caller will be informed that the changes will not take effect until the date specified. Again, all transactions and user's request will be logged and an audit trail will be created.◘

Improving Customer Service Affordability

Submit your technical questions or get free project analysis regarding your telephony application to:
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HOW DO THEY DO THAT?
Elements of an Open Enrollment System

Entering Access Code to Do Open Enrollment

```
c = 1  ;error counter variable
Enrollment:
If c = 4 then ; can not do open enrollment due to security failure
        Rtn = Play "maxtriese.vox"  ; You exceeded the tries allow
for open enrollment and this call is being transfered
        GoTo CallTransfer
Endif

Cleardigits
ReturnCode = Play "AccessCode.vox",0,"@"   ; "Please enter the x
Digit access code to allow you to enter open Enrollment
ReturnCode = GetDigits 5,"#",15
AccessInput = DigitBuffer
lAI = Length AccessInput
If lai <> 5 then
        Rtn = Play "BadAccessC.vox" ;the access code you en-
tered is bad with the wrong number of digits
        c = c + 1
        GoTo Enrollment
Endif
```

Type of User

```
;-------------------------------------------------------------------
; type of user
;-------------------------------------------------------------------
ClearDigits
Rtn = Play "Usertype.vox",0,"@"    ; "Press 1 if 1st time user or any
other key if already enrolled"
Rtn = GetDigits 3,"#",15                  ; "or just # to end."
typeInput = DigitBuffer
w = Length AreacodeInput
If w = 0 then GoTo Menu
if w <> 3 then GoTo GettypeError
```

```
If typeinput = "1" then
        GoTo NewUser
Else
        GoTo ExistingUser
Endif
EnrollmentCodes:
```

Using Enrollment Codes to Database File

```
VARNO = 1
EnrollInput:
ClearDigits
Rtn = Play "EnterCode.vox",0,"@"        ; "Please the 3 digit Enroll-
ment code or just the # key to end this process
Rtn = GetDigits 3,"#",15 ; get digits until # key
EnrollCode = DigitBuffer; or a max of 15 seconds.

If EnrollCode = "" then goto Enrolldata

If EnrollCode = 100 then ; Enroll code exist
        Goto EnrollInput
Elseif EnrollCode = "101" then
                Goto EnrollInput
Elseif EnrollCode = "102" then
                Goto EnrollInput
Else
        GoTo EnrollInput
Endif
EnrollVar = "Code" & VarNo
EnrollVar = EnrollCode
VarNo = VarNo + 1
GoTo EnrollInput
====================================================
;  enter data into database
====================================================
Enrolldata:
T = Uniquiefile
OpenDB Enrollment, "Enrollment"
        insertdb Enrollment
        Enrollment.trackingno = CustomerNo
        Enrollment.Datetime = DTVAR
        Enrollment.Code1 = EnrollVar1
        Enrollment.Code2 = EnrollVar2
        Enrollment.Code3 = EnrollVar3
        Enrollment.Code4 = EnrollVar4
        Enrollment.Code5 = EnrollVar5
        Enrollment.trackingno = t
        Updatedb Enrollment
        closedb Enrollment◘
```