Multispeak, OMS, & Customer Service – What's the link?

Presented by Angela Hare Director of Information Systems Central EMC







Central EMC is.....

- Located in North Carolina
- Rural Electric Cooperative
- 17,500 customers
 - 95% Residential
- 9 Substations
 - 2,050 Miles of line
- 63 Employees
- Service Growth: 5%









1996 – HURRICANE FRAN LEFT CENTRAL ELECTRIC WITH NO METERS TURNING

THE PATH OF HURRICANE FRAN









Continued...

- Could give no information to customers about the outage
- Printed outage tickets from CIS and put them in piles by pole number
- CSR's were only someone for customers to call and vent to
- Very unorganized



PORCHE arrived in 1997





Continued...

Improved organization

- Customers could call automated system to report outages
- Held outage history
- Could provide automated reports to management
- Had to export Customer list from SEDC



Over the next few years...

- Added additional software, mapping, AMR, Partner
- Customers still complained about no information during outages
- Systems were great but...
- Created custom links and ways to work with the data.





Introduced to Dispatch in 2004 Installed in 2005 Saw an immediate impact on Customer Service







We were able to share data across our organization in ways that weren't possible before.

We Integrated IVR/AMR/CIS all with Dispatch via Multispeak links



IVR/AMR/CIS/ integrated into Dispatch

🚺 DisSPatch - [(Linked Local Model) C	:Wilsoft\DisSPatch\Database\linked model.wm\]	
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How does it work?





Enter the web address and user credentials for the OMS vendor

Outage Management I	ntegration - Web Service Based (Detailed)	
Enable Outage Management Integration		Web Service calls will be made to the URL listed below to retrieve or send Outage Management System Data.
Outage Management System Web Service URL	http://10.200.18.127	The URL used in making Web Service calls to the Outage Management System.
Username	milsoft	The User Name for Account that exists on the Outage Management System.
Password	milsoft	The Password for Account that exists on the Outage Management System.
Interface Tests	PingURL GetMethods	Test the URL using these web service methods.
Host Integration	http://turtle/TS2/webapi/OD_OA.asmx	These Web Service Interfaces can be called from external Outage Management applications



Select the increments the substations should be polled

	тот ние сперенно	Livery.	oo minatoo	•	12112000 2101 PM	112112000 0102110	•
	TS1 Outage Detection Polling	Every	1 hour	¥	6/6/2006 9:15 AM	7/13/2006 1:01 PM	۲
✓	Update Endpoint Ranges	Weekly	2 minutes 5 minutes		7/22/2006 10:00 AM	7/29/2006 10:00 AM	۲
	Warehouse Update Process	Daily at	10 minutes 15 minutes		7/27/2006 6:00 AM	7/28/2006 6:00 AM	ی 🕲
V	Weekly Maintenance	Weekly	30 minutes 1 hour 1 hour 30 minutes 2 hours 2 hours 3 hours 4 hours 5 hours		7/27/2006 1:15 PM Cancel	8/3/2006 1:15 PM	۲
			6 hours 12 hours 24 hours				



Signal Quality Range Over Number of Endpoints Substation Processing Unit: JSYONE SPU Average: 7379.07 Phase A: 9556.45 Phase B: 4531.85 Phase C: 8186.33







- We only poll our stations during storm situations to compare outage calls to system data.
- We poll every 30 mins or when we want to determine if an area has been restored.
- We do not have our substations call us.





- Will you be using AMR as your primary outage reporting or as a suppliment?
- Is this for major storms and clean up only?
- Would it be better left off until you want to invoke the command?
- Do you want your substations calling you or would you rather call the substations?
- KEEP YOUR AMR DATABASE CLEAN AND UP TO DATE!!!!

Enabling the OMS to AMR interface

MR D	ata Importer
tions	
JRL d	of AMR_system: http://turtle/ts2/webapi/MR_EA.asmx
🕶 Im	port AMR vendor tags (determines which meters have AMR)
~	Before importing, clear existing AMR vendor tags containing: Hunt
Im	port outage events occuring from 10/28/2005 👻 to 10/28/2005 💌
	Before importing, clear existing outage events if vendor tag contains: Hunt
Im	port AMR meter readings
	Import meter readings from this date: 11/ 7/2005 or
	Import most recent meter readings
	Import kW demand directly into calculated load
	Before importing, clear existing calculated load if vendor tag contains:
	Import kW demand into this billing load group:
	Clear existing billing load from a consumer before applying AMR billing load
	If a meter does not report kVAR data
	🔿 Do not change %PF
	Assume consumer %PF to be: 100
	🖌 Bun 👖 Close 🖌 🖌 Ca



Making it work







- Outage calls come from 3 sources: AMR, IVR, & Customer Service Reps
- This data is all compiled on the OMS map
- Our Dispatch center is not manned 24/7 so we only turn AMR on when we are working storms
- We can poll our stations in about 20 mins
- AMR is always communicating to SPUs, detects outages based on signal strength drop





Hunt AMR Endpoint



TS2 Endpoint s/n	16910977		Status	Archived
SPU			Current Channel	0
Firmware Version	12		Meter Dial Digits / Kh	5 / 7.2
Initial/Latest kWh	47575/79539		Latest Signal Quality	0.7767
Initial Programming	9/9/2004 11:14 AM		Last Programming	7/27/2006 12:55 PM
Last Good Packet	7/26/2006 12:00 AM			
Account Number			Customer ID	
Service Location			Map Location	
Billing Cycle			Grid Location	
CIS Data	MCLEAN HARGIE LEE, 1204 MURCHISON TO Phone: 919-499-661	,)WN RD 5	Last OA Predicted Outage	
Command Groups	Model Family Configuration	TS2 Sta Hunt 05	ndard AMR Model Family (0580 80 Configuration A))
Status Groups				
Name (Group type)	No status groups			



Verifying the Outage





Verification Process

×

Set Verify Status

Transformer - TR.20411

-Set Outage Status (3-Phase Operation)-

Current Status

🔽 🛆 Phases The Same

Set New Status

Phase C	Verified Open	Verified Open	-

-Time Status Changed

7/31/2006 10:57:56 AM



Verification is done when the lineman confirms the outage element.

This changes prompts on the IVR side automatically





Helps Dispatchers see where crews are
Changes prompts on the IVR side
Let's CSR's see if crews are working on outages





Restoring the outage





Restore Element Transformer - TR.20411 Set Outage Status (3-Phase Operation) All Phases The Same Set New Status Current Status Phase C Verified Open Normal Or No Implied D 💌 Call back all customers that called. Time Status Changed 7/31/2006 10:58:52 AM 🗶 Cancel ΠK

Calls Customers for verification
 Holds AMR outages and checks them for restoration events



Sharing OMS/AMR data





Call Details fo	or GETZANDANNER RALPH - Micro	soft Internet	t Explorer				
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ress 🙆 http://	/10.200.18.127:8080/WebCall					So Lini	
	条				GETZANDA		
Initial Call: Last Call:	8/11/2006 8:06:00 PM 8/14/2006 9:24:06 AM	Billing Data	a Outage Data Calling History Out	tage History		^	
Times Called:	2 Type: MANUAL	Acct Status	Active				
Caller Name:	GETZANDANNER RALPH	Acct Name	GETZANDANNER RALPH	Account	5846702		
Trouble Began:	8/11/2006 8:06:00 PM	Svc Address	131 NC HWY 24	EALink	16741570		
Check List:	🗹 Power Is Off	Address 1	OUTBUILDINGS	Meter	28582		
	Checked Fuses or Breakers	Address 2	D11D-3	CIS Phone	CIS Phone (919) 498-3922		
	Service Wire Down	City	CAMERON	State NC Zip	0283260000		
	🔲 Lights Blinking 📃	Substation	JOHNSONVILLE	Feeder 24 EAST	Phase C		
	Lights Dim	Transformer	TR.18135 Ma	apLoc			
Call Back:	Call Returned:	E					
Phone: (9	919) 498-3922 CID:						
Reviev	w by Dispatcher (Alerts Dispatcher): 📋						
- Description	CSR Remarks Logged Events					9	
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Post	Outage Call Type of AMR Proce	essed from 1	Milsoft MultiSpeak Server.				
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Management View

😫 Outage Viewer Detail	s - Microsoft Internet Ex	plorer										
File Edit View Favorit	es Tools Help											
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Other Multispeak Links

- Hunt meters are deployed automatically when meters are changed on the SEDC side
- Customer service reps can click on Hunt link from within SEDC and view specific meter information.





SCADA implementation 2007Mobile Data?





Return on Investment

- The savings from the reduced time spent on outage report preparation need to be added, bringing the total annual DisSPatch OMS savings to \$81,892.35.
- The return on investment for DisSPatch OMS, is 164.3%.
- The payback period is 14.32 months.





What's the real ROI?

Customer Satisfaction

Central Electric Membership Corporation

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A Touchstone Energy Cooperative X⁺*

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