

## MultiSpeak Version 3.0 Interoperability Assertion

Statement of Interoperable Functionality Between:

Vendor(s)	Product	Product Version	Role	Batch Interface	Web Client Interfaces	Web Server Interfaces
Cannon Technologies	Yukon	3.2	OD			OD→OA
National Information Solutions Cooperative	NISC OMS	1.7	OA		OD→OA	
Cannon Technologies	Yukon	3.2	OD		OA→OD	
National Information Solutions Cooperative	NISC OMS	1.7	OA			OA→OD

### Summary:

Web Service interfaces using MultiSpeak standards were developed in order to provide NISC OMS and Cannon Yukon customers a way to utilize the Cannon AMR system for outage verification.

### Prerequisites:

NISC OMS retrieves information of Cannon AMR meters from the iVUE system. Please refer to the NISC and Cannon MR\_CB Assertions document for the prerequisites.

### *Enable the Integration in YUKON*

Minimal setup is required to define a Multispeak interface in Yukon. A Multispeak setup page is provided to define the interface(s) to NISC iVUE and/or NISC OMS. Here, one will enter the Vendor's Company and Application names, along with the URL for the NISC Multispeak webservice. Interfaces are enabled by checking the supported interfaces check boxes.

### *Enable the Integration in iVUE OMS*

Minimal setup is required to define a MultiSpeak interface in NISC OMS. A MultiSpeak setup page is provided under Admin > MultiSpeak Interfaces. Here, one will enter the Vendor's Company, along with the URL for the Cannon MultiSpeak webservice and any user/password information. Interfaces can also be tested from this page. Once the interfaces are defined, the integration can be enabled from Admin > Server Settings under the Integration tab.

### Specific Vendor Assertions:

1) NISC OMS can request Cannon's Yukon to provide the outage status of one or more meters

**Importance to user:** The user can determine the current outage status of a Cannon AMR meter without sending a line crew to the site. The user can also confirm the restoration of power to meters.

**How Achieved:** When an outage call is entered into the NISC OMS or an outage is restored from NISC OMS, a process within NISC OMS will send requests for current outage status of affected meters to Yukon. The Yukon server then performs a ping (a request to communicate) to the meter(s), determines the communication status of the ping, and then sends an outage detection event notification containing the current communication status of each meter to NISC OMS. Yukon pings *all* of the requested meters from NISC OMS's outage detection initiation but sends the meter status back to NISC OMS for *each* individual meter as soon as the status is determined. The NISC OMS can then update the status of the outage, if necessary, to agree with the status provided by Yukon.

**Products:** NISC OMS and Cannon Yukon platform  
**Summary of Interoperability Test Results**  
**Interface #5**  
**OD→OA**

**Table 1**  
**Recommended MultiSpeak Methods**

<b>Method Name</b>	<b>Importance to User</b>	<b>Supported by Server<sup>1</sup> (OD)</b>	<b>Supported by Client<sup>2</sup> (OA)</b>	<b>Verified Inter-operable<sup>3</sup></b>
GetMethods	Requests a list of methods supported by the server.	X	X	X
PingURL	Verifies that the server is running and reachable.	X	X	X
GetAllOutageDetectionDevices	Returns all Outage Detection Devices.			
GetOutageDetectionDevicesByMeterNo	Returns an Outage Detection Device Associated with the Given Meter Number.			

**Table 2**  
**Optional MultiSpeak Methods**

<b>Method Name</b>	<b>Importance to User</b>	<b>Supported by Server<sup>1</sup> (OD)</b>	<b>Supported by Client<sup>2</sup> (OA)</b>	<b>Verified Inter-operable<sup>3</sup></b>
CancelODMonitoringRequestByObject	Cancel outage detection monitoring on the list of supplied circuit elements.			
DisplayODMonitoringRequests	Requests a list of circuit elements being monitored.			
GetDomainMembers	Requests the members of a given domain (type of fixed information, such as all of the counties in the database).			
GetDomainNames	Requests the domains (lists of fixed information, such as the counties served, or the acceptable status codes for this installation).			
GetOutageDetectionDevicesByStatus	Returns all outage detection devices with a given status.			
GetOutageDetectionDevicesByType	Returns all outage detection devices with a given type			
GetOutagedODDevices	Returns the outage detection devices that are currently experiencing an outage.			
InitiateODEventRequestByObject	Initiates an outage detection event request on service locations experiencing an outage downline from a circuit element.			
InitiateODMonitoringRequestByObject	Initiates an outage detection monitoring request on service locations downline from a circuit element at a given time interval.			
InitiateOutageDetectionEventRequest	Initiates an outage detection event request on the list of meter numbers.	X	X	X
ModifyODDataForOutageDetectionDevice	Allow OA to Modify OD data for a specific Outage Detection Device object.			

- 1) Supported by Server means that the server has demonstrated in some interoperability test (not necessarily with this client) that it can support the method.
- 2) Supported by Client means that the client has demonstrated in some interoperability test (not necessarily with this server) that it can call the method.
- 3) Verified Interoperable means that both the client and server have demonstrated in this interoperability test that they can usefully transfer data using this method.

**Summary of Interoperability Test Results**  
**Interface #5**  
**OA → OD**

**Table 3**  
**Recommended MultiSpeak Methods**

Method Name	Importance to User	Supported by Server <sup>1</sup> (OA)	Supported by Client <sup>2</sup> (OD)	Verified Inter-operable <sup>3</sup>
GetMethods	Requests a list of methods supported by the server.	X	X	X
PingURL	Verifies that the server is running and reachable.	X	X	X
ODEventNotification	Notifies a change in outage detection events	X	X	X

**Table 4**  
**Optional MultiSpeak Methods**

Method Name	Importance to User	Supported by Server <sup>1</sup> (OA)	Supported by Client <sup>2</sup> (OD)	Verified Inter-operable <sup>3</sup>
GetActiveOutages	Returns the outage Event IDs for all active outage events.			
GetAllCircuitElements	Returns all circuit elements.			
GetChildCircuitElements	Returns circuit elements immediately fed by the given line section or node (eaLoc).			
GetDomainMembers	The client requests from the server a list of names of domains supported by the server.			
GetDomainNames	Requests the domains (lists of fixed information, such as the counties served, or the acceptable statusCodes for this installation).			
GetDownlineCircuitElements	Returns all circuit elements downline from the given circuit element.			
GetDownlineMeterConnectivity	Returns the meter connectivity for all meters down line from a given meter			
GetModifiedCircuitElements	Returns all circuit elements that have been modified since the previous session identified			
GetOutageEventStatus	Returns the current status of an outage event, given the outage event ID.			
GetOutageEventStatusByOutageLocation	Returns the current status of an outage event, given the outage location.			
GetParentCircuitElements	Returns circuit elements immediately upstream of the given line section or node (eaLoc).			
GetSiblingMeterConnectivity	Returns all meters on the same transformer as the given meter.			
GetSubstationNames	Returns all substation names			
GetUplineCircuitElements	Returns circuit elements in the shortest route to source from the given line section or node (eaLoc).			
GetUplineMeterConnectivity	Returns all meters from the first up line distribution transformer.			
ODDeviceChangeNotification	Notifies of a change in outage detection events			

- 1) Supported by Server means that the server has demonstrated in some interoperability test (not necessarily with this client) that it can support the method.
- 2) Supported by Client means that the client has demonstrated in some interoperability test (not necessarily with this server) that it can call the method.
- 3) Verified Interoperable means that both the client and server have demonstrated in this interoperability test that they can usefully transfer data using this method.

Certified by:

For Cannon Technologies/Cooper Power Systems:



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Disclaimer:

The assertions made in this document are statements of the vendors offering the two products listed above. The Testing Agent has observed the software performing the tasks described in these vendor assertions.

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