WPS: E6

GTCC/BRC

Designated External System

GTCS

Accu Weather Server	Metrolinx internet access	Weather Prediction System Web Based Server	Metrolinx internet access	Firewall	External System Gateway Weather Prediction Gateway		Firewall	Control System

External System Gateway

Weather Prediction Gateway

GTCC1/ BRC1/ active server	GTCC2/ BRC2/ passive server

API Key

OPC server

OPC Client

API Key

API Key

API Key

Port 443

Port 443

http

GET HTTPS Periodic Request with location

Configuration file with list of location

GET HTTPS Request
Port 80

GET HTTPS Request

Text Search Request of location in conf file

Location key

Location key

Location key

4 requests:
-Daily forecast
-Current conditions
-Weather alarms
-Weather alerts

GET HTTPS request

GET HTTPS request

Daily request:
API key
Location key
Metric
Hostname
version

GZIP

4 responses:
-daily forecast
-current conditions
-weather alarms
-weather alerts

Port 80

HTTPS Response:
json
I day
interval

json

HTTPS reponse

Metrolinx Network

DMZ

HTTPS response

DMZ

OPC-UA

GTCS Network
Port 4840

OPC-UA

4 responses:
-daily forecast
-current conditions
-weather alarms
-weather response

Accu Weather Server API

Text Search
Daily forecast
Current condition
Weather alarms
Weather alerts

Daily forecast:
...Date
Temperature.minimum.value
Temperature.minimum.unit
Temperature.maximum.value
Temperature.maximum.unit
Day.iconphrase
Night.icon.phrase
HTTPresponsecode
...

Accu Weather Server API

Weather Prediction
OPC structure
Pseudo-OPC structure
Response

Weather Prediction
OPC structure
Pseudo-OPC structure
Response

Current condition:
...localobservationdatetime
weathertext
temperature.metric.value
temperature.metric.unit
responsecode

Weather alerts:
...countrycode
alertid
description.localized
category
priority
type
area.name
area.starttime
area.endtime
httpresponsecode
...

Weather alarms:
... date
alarmtype
value.metric.value
value.metric.unit
day.metric.value
day.metric.unit
night.metric.value
night.metric.unit
httptresponsecode