

## WBMM Basic Definitions of Components, Connections and Messages

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### Terms:

**Management Server:** The entity soliciting management information and providing management instructions.

**Management Interface:** Device or service being managed, or proxy for this device or service

**Schedule:** A set of instructions from the management server to the management interface. These may include immediate requests or element value changes, conditions for alerts, and/or a set of requests to be satisfied at a future time or periodically.

**Security Policy:** Conditions set up at the *Management Interface* and the *Management Server* governing:

Servers with which the *Management Interface* will communicate

Level of Authentication that the *Management Interface* requires and is prepared to supply

Use and Level of message encryption

### Connections and Messages:

**Usage Report:** *Management Interface* contacts defined *Management Server* at previously defined date-time with values of previously defined objects. Preferred transports are HTTP for real time, with SMTP being a store&forward alternate. On a real-time connection, what a management server can return is limited to requesting a Command Query.

**Alert Report:** *Management Interface* contacts defined *Management Server* on occurrence of previously defined event. The event may be some combination of state/status conditions, subject to moderation criteria, all previously defined. Preferred transports are HTTP for real time, with SMTP being a store&forward alternate. In a real-time connection, the Server can respond with immediate requests for objects, and can request a **Command Query**; but the *Management Interface* cannot change the **Schedule** previously communicated to the *Management Interface* in response to a **Command Query**.

**Command Query:** *Management Interface* contacts *Management Server* for instructions, requests. This query may be sent

1. At previously defined times or periods
2. In response to a tickle.
3. In response to a local command

Preferred transports are HTTP for real time, with SMTP being a store&forward alternate. On real-time connections, *Command Query* opens a path whereby the *Management Server* can communicate individual immediate requests or a **Schedule** to the *Management*

*Interface*. For non-real-time communication, the *Command Query* is in effect a polling of the server that may contain a ***Schedule*** message from the *Management Server*.

**Tickle:** *Management Server* sends a unicast, unidirectional message requesting that the *Management Interface* to which the **Tickle** is directed send an immediate **Command Query** to the identified *Management Server*. The protocol has not been determined but could use UDP. The message should be minimal with just the identification of the *Management Server* to be contacted, or a request that the *Management Interface* check its mailbox), and the date-time of the message for tracking. Depending upon the policies set up at the *Management Interface*, it may or may not respond to this tickle.

### **Operations:**

The following operations were proposed by Harry in his WSDL, with some embellishment. Text descriptions will be added when certain issues are clarified.

- GetAttributes
- SetAttributes
- ExecuteCommand ?
- GetAll
- RegisterAlerts
- RegisterReports
- Unregister