

Web Services Show & Tell

HostedControls: What Is Real-Time?

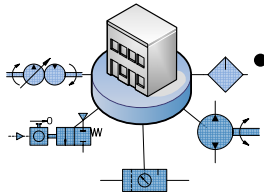
By: Matt Horton

VP Technology, Cyrus Technologies, Inc.

- Many times we are asked about “Real-Time” controls in building automation.
 - “Basically, when a command is issued, how long does it take?”
 - “When I am viewing a reading on-screen, how old is the value?”
 - “How long does it take a critical alarm condition to trigger and send a notification?”

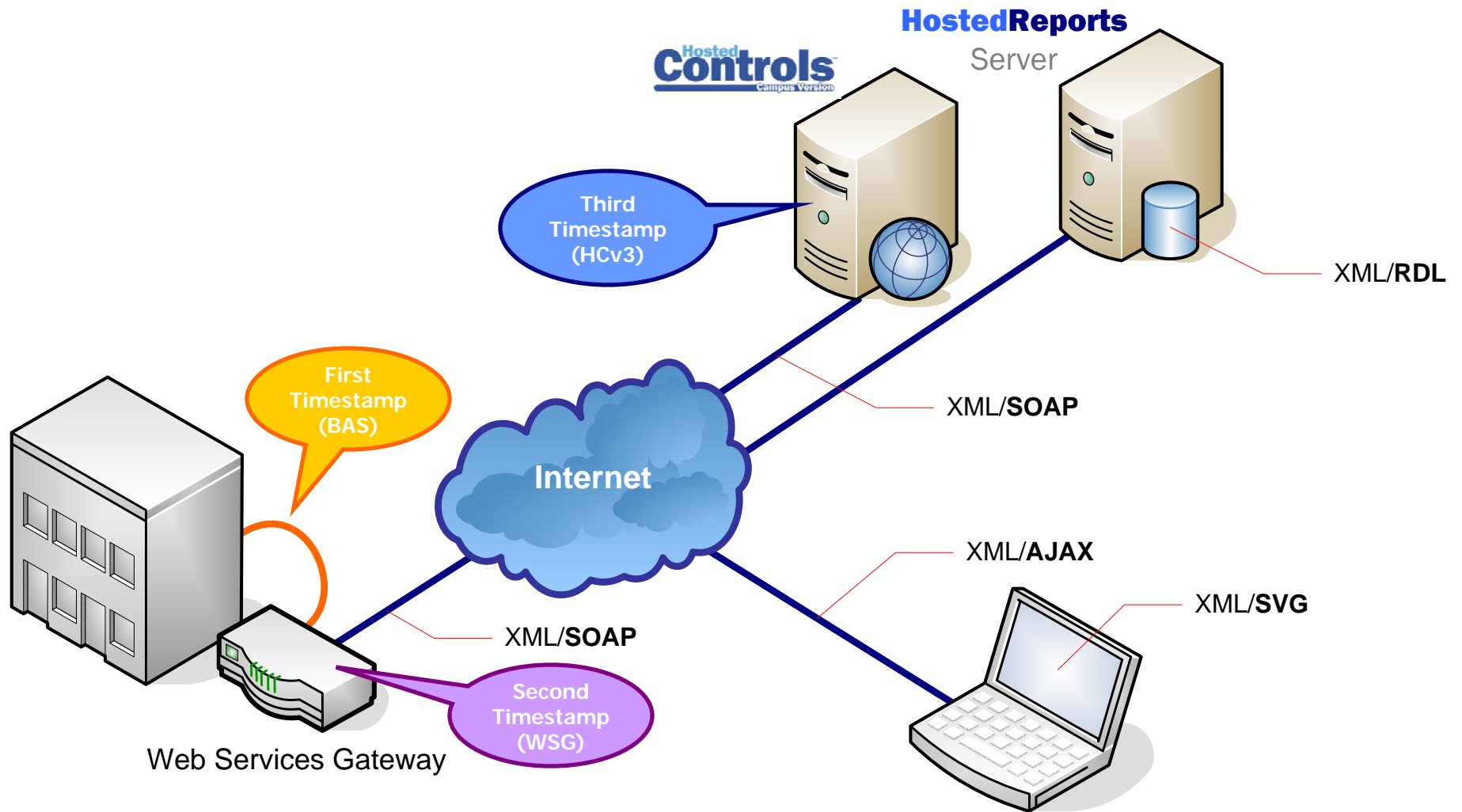


- The Web or Web Services aren't real-time.
 - The misconception here is that not much in building controls today is real-time.
 - When issuing a command or monitoring a value, there are degrees of "Real-Time"



- A typical light switch is a real-time command/reaction; this is nearly the speed of light (as real time as it gets)
- A pressure gauge, is a near real-time reading; it takes a very small amount of time for reaction (still considered real-time)
- DDC is actually a little more real-time than straight pneumatics; electricity is faster than air-pressure (does anyone notice?)
- Properly configured network-based controls is still the slowest (most consider the benefits to outweigh the latency)

- A side benefit of our HostedControls Web Services “No Data Left Behind” philosophy is our three time-stamp latency analysis
 - Every command and value reading has three timestamps.
 - First – Timestamp the BAS
 - Second – The Web Services Gateway
 - Third – HostedControls Smart Graphics Server
- We’ve found, after billions of rows of data, that Web Services is faster than typical BAS



- Now we can demonstrate where the true bottlenecks exist.
- Customers are no longer concerned about the web application being detrimental to “real-time”.
- Customers can work to improve BAS latency.
- A campus with lots of different BAS providers can be analyzed to show which systems are faster and more consistent.

Hosted ControlsSM Demo Time!

Thank You