



A Rockwell Automation Company

SaskTel Mobility Communication Tower SCADA System

The Client:

SaskTel Mobility is well established as Saskatchewan's complete wireless solutions provider offering a wide range of services such as paging, cellular, FleetNet, satellite, and wireless data. SaskTel Mobility is a division of Saskatchewan

Telecommunications Holding Corporation and an affiliate of SaskTel.

The Requirement:

Hinz installed a SCADA system for monitoring SaskTel's radio towers in 1992. The system consisted of a multi-user PC-based host based on FactoryLink VMS and Modicon PLCs used as Remote Terminal Units (RTUs). The SCADA host communicated to the RTUs via a multiplexed modem pool and dialup terrestrial phone lines. Due to the expansion of the radio coverage, SaskTel required more towers to be monitored. The number of monitored sites was increased from 150 to 260.

At the same time the VMS operating system had to be updated due to DEC support agreements and SaskTel policy. The VMS OS upgrade also required the FactoryLink, RDB database, and communications drivers to be upgraded as well.

The Design Solution:

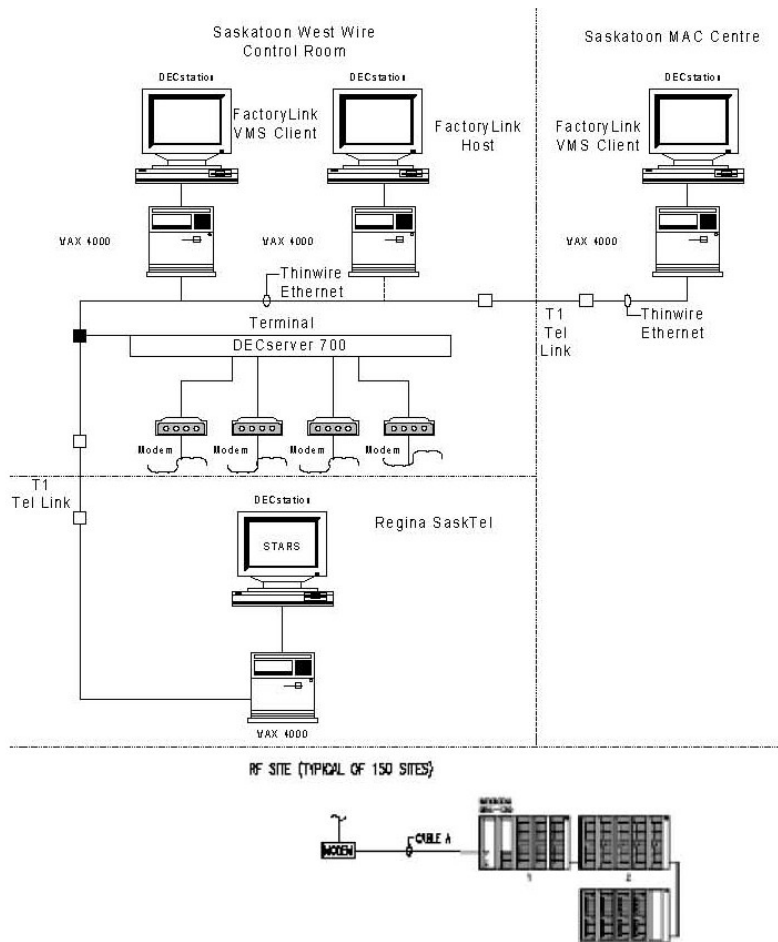
The FactoryLink tag database was increased in size and all of the C code that accessed database information was modified to access the larger tag arrays. An additional hard drive was added to the FactoryLink VMS host to accommodate the additional storage requirements for all of the VMS software packages. The custom driver was modified to add some features that SaskTel required. Development and

testing was accomplished off-line with the backup DEC workstation. Software was purchased for an additional view node so that three operators could access site information at the same time.



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System Specifications:

- DECstation 4000 with 80 MB ram, 1 GB and 2 GB hard drives
- FactoryLink/VMS host
- 2 FactoryLink/VMS clients
- 4 dialup modem drivers
- 30 graphics screens
- Maximum of 130,000 monitored points system-wide
- 260 sites maximum
- 180 Modicon Compact 984/A130 PLCs
- 184 dial-up modems
- Maximum of 130,000 alarm points, each with three different alarm priorities available
- Alarm status sent to external alarm monitoring system manned 24 hours per day
- Alarms time-stamped within each PLC
- Time/date synchronized between each PLC and the host

For further information or to contact a Hinz office near you, please check our website at:

www.hinz.com