ActiveState ®

CASE STUDY | **ROCKWELL COLLINS**

EXECUTIVE SUMMARY

THE CHALLENGE

▸ **Provide** quickly customizable network monitoring solutions in broadcast communications, government and commercial systems

▸ **Ensure** stability and 24/7 uptime for critical monitoring systems

▸ **Be able** to customize each installation to meet specific customer requirements

THE SOLUTION

▸ **ActiveTcl** from ActiveState to customize components of MaxView system

THE RESULT

▸ **Faster** development time due to ActiveTcl OEM licensing

▸ **Stable** system and comprehensive support from ActiveState

▸ **Easy,** automatic customization

THE CHALLENGE

Stability, Uptime and Flexibility For Rockwell Collins has a two-fold, the development challenge with MaxView is twofold:

▶ Provide highly customizable solutions for a widely divergent customer base;

▶ Ensure uptime in sectors where downtime is simply not an option.

Rockwell Collins' communication and aviation electronic solutions are used on all seven continents. Their MaxView Network Management System provides remote control and automation monitoring control for satellite and broadcast communications, as well as government and commercial systems. Using MaxView, network operators can see and manage an entire communications network in a single view without having to interpret dashboards from multiple proprietary systems. Users can control their network using MaxView and can automate complex tasks and receive advanced reports. Using one system instead of many means less complexity, less training, and lower support costs. MaxView also enables scheduled changes without human involvement. If a device fails, MaxView will automatically switch over to a backup and notify users through automated email or call.
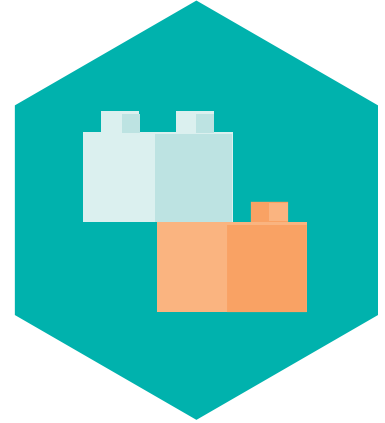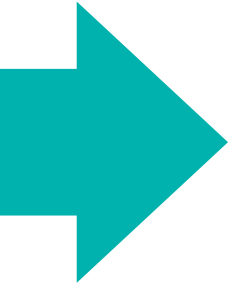
THE SOLUTION:
ACTIVETCL

Faster development time
Stable system & comprehensive support
Easy, Automatic Customization

The MaxView modular product suite has a key sales feature. It can be customized for specific customer user interface requirements. As such, Rockwell Collins needed a technology solution that would make it fast and easy to customize MaxView according to distinct customer interface requirements. Enter ActiveTcl. Rockwell Collins relies on ActiveState's ActiveTcl language distribution because it is a complete, ready-to-install commercial grade distribution that works cross-platform with Windows, Linux and Mac OS X plus Solaris, AIX and HP-UX. Tcl (Tool Command Language) is a powerful dynamic programming language used frequently for networking, administration and testing. It is ideal for cross-platform development. ActiveTcl gives Rockwell Collins the flexibility and stability required.

LICENSING

Rockwell Collins uses OEM licensing from ActiveState to embed ActiveTcl in MaxView. They can get their product to market faster with the right licenses in place.

THE RESULT

ActiveTcl is what powers the device drivers and the code that connects MaxView to a specific device or system on the customer end. ActiveTcl also means Rockwell Collins doesn't have to manually change its core product to work with every unique customer interface.

"We have a Tcl interpreter built into our product so we don't have to change the core product to adapt to different interfaces," says Brian Brady, a senior software engineer at Rockwell Collins. ActiveTcl also powers automation logic, which can be customized by end users onsite once the system is operational. "Customers can change these smaller bits of code that, thanks to ActiveTcl, don't have to be compiled. Nor do they affect the quality and stability of the core product."

ActiveTcl gives Rockwell Collins the ability to make development changes on the fly at customer locations. "We can be away from our development environment and we don't have to worry about compiling code and distributing it for particular platforms because ActiveTcl supports so many platforms. It's the cross platform aspect of ActiveTcl that's so valuable to us."

ACTIVETCL IS WORRY-FREE TCL FOR CRITICAL SYSTEMS

Uptime is critical in the broadcast industry, where satellite time is incredibly expensive. "We have service agreements where seconds of downtime are worth millions of dollars, so it's critical everything stays up," Brady says. "And in the government and military space, it's even more important than that."

Rockwell Collins knows it can count on ActiveState. "ActiveState's reputation and support of dynamic scripting languages is unparalleled. ActiveTcl is the best-supported distribution of Tcl that I know of," Brady says.

DEVELOPMENT SPEED KEEPS MAXVIEW AHEAD OF COMPETITORS

ActiveTcl also speeds up development time. "ActiveTcl helps us deliver solutions faster than our competitors. And we can react to changing requirements,"

Brady says. Rockwell Collins doesn't have to waste time going through a full software development cycle or creating a new product from scratch for each

> **"There's a quick learning curve. Our customers have learned to go in and start doing customization work themselves."**

implementation when responding set of new customer requirements. "We have a core product that we're reusing, that we already know is set and stable, and then we only change the ActiveTcl part of it for each implementation. We've separated out the customizable parts of it from the core code. And when we write code in ActiveTcl, we don't have to compile it to use it. We can run it right then and troubleshoot problems very quickly."

RAPID DEVELOPMENT AND EASE OF CUSTOMIZATION

"There's a quick learning curve. Our customers have learned to go in and start doing customization work themselves." Ultimately, ActiveTcl ensures MaxView is faster to develop, easy to customize, and stable. And with those bases covered, Rockwell Collins can provide a high-quality product that consistently meets its customers' needs.

ActiveState®

ABOUT ACTIVESTATE

ActiveState is a leader in providing commercial level open source language distributions. It provides commercial versions of Python, Tcl, Perl, Ruby and Go. More than two million developers and 97% of Fortune 1000 companies use ActiveState open source language builds including CA, Cisco, Pepsi, Lockheed Martin and NASA. To learn more, visit activestate.com