

AUTOMATED COMMAND AND CONTROL FOR SMARTER SPACE OPERATIONS

Introduction

Amplify your satellite mission command and control with Ace CtrlPointTM, an integrated, turnkey telemetry, tracking, and commanding (TT&C) software solution complemented by the automation of common tasks to reduce workloads, minimize errors, and streamline mission operations. The solution is customizable to mission requirements, user-friendly, accurate, secure, and modern, based on 20 years of operational success. Now operators can focus solely on the mission at hand while you can rest assured you've invested in an affordable software that's close to commodity and Risk Management Framework (RMF) compliant.

Overview

Ace CtrlPoint is an automated space vehicle and ground station command and control (C2) application with a plug-in architecture that provides nearly lights-out telemetry, tracking, and commanding (TT&C) operations. The solution offers overall situational awareness of satellite operations center (SOC) hardware and software, including ground station status and satellite vehicle data, giving operators an easy-to-use, automated, and customizable product that ensures their focus is on what's important: the mission. Ace CtrlPoint is compliant with Space and Missile Systems Center Enterprise Ground Services (EGS) UI/UX standards, fitting into many different ground system environments that control and status old and new hardware. In the past, C2 systems were stovepiped and designed to function in a singular environment. Commercial-off-the-shelf (COTS) capabilities plug into standardized environments, allowing the product to be ready immediately within a range of mission architectures.



Key Technical Features:

Highlights

- Automated integration with antenna scheduling
- Automated ground station control and status
- Automated data forwarding for analysis
- Automated command plan execution
- Automated anomaly detection
- Automated turnkey TT&C system

Benefits

- Reduces integration time and cost
- Reduces manpower for operations
- Improves operational efficiency and performance
- Reduces potential for operational errors
- Reduces interruption of the mission
- Rapid delivery without expensive integration costs

Capabilities

Out-Of-The-Box Solution

Ace CtrlPoint offers ground network plug-ins and status for satellite control network (SCN) antennas and EGS systems with minimal integration.

Customizable

Plug-in architecture allows mission-unique (MU) plug-ins to be added as needed. For example, the product can be tailored to fit time-division multiplexing (TDM) and Consultative Committee for Space Data Systems (CCSDS) mission standards.

Robust Automation Capabilities

Electronic command plans enable lights-out operations, which cuts down on mission costs and increases efficiencies.

CCSDS-Ready

The software comes with a CCSDS COTS commanding and telemetry plug-in set, enabling swift integration when customers have CCSDS-ready mission needs. The CCSDS plug-ins can be loaded into Ace CtrlPoint and be ready to go in hours, supporting multiple CCSDS standards.

User-Friendly

The user interface is well integrated and can be customized to display anything an operator needs. Consistent displays across all missions and satellite operations centers ensure that once an operator has been trained, they can use Ace CtrlPoint in any situation.

Adaptable

The product is compatible with multiple major front-end processor (FEP) vendors and is easy to interface with.

Alerts, Warnings, Errors, And Out-Of-Limits

Color-coded limit checking is provided on satellite vehicle telemetry, giving user alarms/warnings/errors associated with the status.

Situational Awareness

Problems can be diagnosed by looking through each layer of a telemetry screen to figure out what's wrong. This software is designed to provide the proper level of situational awareness to the user without being overwhelmed with metadata. Ace CtrlPoint can investigate specific data/telemetry points, or it can provide a comprehensive display of roll-ups (red/yellow/green status) for subsystems and the overall vehicle.



For further information, please contact:

CURTIS BELL

Solutions Architect / Business Development

Direct: +1 719.394.9230

Curtis.Bell@brxtn.com