

Lockheed Martin Space Based Infrared System (SBIRS) Boulder, CO



THE CHALLENGE

The Space Based Infrared System (SBIRS) is the next-generation missile warning system that will also provide greatly expanded capabilities for intelligence, surveillance and reconnaissance missions. SBIRS consists of three individual space constellations and an evolving ground element: The Defense Support Program (DSP), SBIRS High, and the Space Tracking and Surveillance System (STSS). The program supports four mission areas: Missile Warning, Missile Defense, Technical Intelligence, and Battlespace Characterization. SBIRS is one of Air Force Space Command's highest priority space systems.



Lockheed Martin SBIRS missions.

THE SOLUTION

The Sammi Application Development Kit (ADK) features a Runtime Environment (RTE) with cross-platform portability that can manage incoming data from all types of platforms within a network at once. Regardless of the originating platform within the network, be it Microsoft, IBM, Linux, HP, Sun, or any other type, the Runtime manages the data quickly and efficiently without needing any special upgrades or plug-ins. The scope of the SBIRS program requires a solution that can manage incoming data from several different originating applications, such as the Sammi Runtime.

SBIRS is a highly proprietary system that requires security at several levels of the application. The Sammi Runtime supplies multiple security levels that can limit access to displays, applications, or even the viewing of particular dynamic objects. Thus, a display's security level may be set so that all users can view the display, while only some users may view particular dynamic objects or have access to particular controls.

The SBIRS program encompasses several sub-elements, all with mission critical data that needs assurance of delivery, even in event of an application failure. Sammi's multi-process architecture allows for remarkably reliable "failover" capabilities. If a server or application fails, the functionality is automatically assumed by backup servers or applications. This results in a more reliable and functional system that is quick to recover from outside failures, while remaining transparent to the user. SBIRS values Sammi's failover features for the critical work it performs on a daily basis for several sub-systems.

- **Industry:**
Aerospace
- **Application:**
Satellite Command & Control
- **Benefits:**
 - ◆ Cross-platform portability
 - ◆ Multiple Security Levels
 - ◆ Automatic Failover/Redundancy

About Kinesix

Kinesix Software develops, markets and supports software development tools used to rapidly deploy client/server and Web-based visualization and control systems with real-time, interactive graphics. Kinesix has supplied graphical interface solutions to 9 of the world's 10 largest aerospace companies.

Sammi® is a registered trademark of Kinesix Software.