Since 1977, the General Authority of Civil Aviation has been responsible for managing and regulating air traffic and airports in the Kingdom of Saudi Arabia (KSA). In 2005, the Domestic Airports (DA) Business Unit was established. Currently, the GACA DA is responsible for managing the GACA headquarters, controlling air traffic, and managing airport facilities of the 23 domestic airports throughout the KSA.

Because of multiple, incompatible legacy IT systems and the extensive use of manual processes, GACA faced a number of challenges in the areas of facilities management and lease administration.

The agency, for example, needed to centralize accurate space usage and categorization data, as well as link as-built drawings to the facilities management database.

It also had to create a comprehensive lease management system that preserved legacy systems data and functionality while matching leases to actual space utilization. And it needed to automate the application of the Saudi Civil Aviation Tariff Law to its operations.

GACA found the solution to both challenges in ARCHIBUS.

**Goal: Enterprise-wide Facilities Management**

With more than 6,500 buildings and structures inside more than 214,000,000 m$^2$ (more than 2.3 billion square feet) of lands to be managed, GACA DA decided they needed to manage their properties and leasing agreements with the latest technologies in the international market. GACA DA teamed up with ARCHIBUS Solution Centers-Saudi Arabia (ASC-SA) to establish an enterprise-wide facilities management system. That system would provide management with the ability to make informed decisions by replacing manual space and lease management processes with automated processes—and links to ESRI GIS data—to increase the level of management insight and efficiency, as well as to minimize costs.

*Saudi Arabia’s 23 airports are widely distributed throughout the country and comprise over 214,000,000 m$^2$ of interior and exterior space*
Integrating ARCHIBUS and GIS
Based on experience in both GIS and the facilities management fields, ASC-SA designed an integrated system utilizing the capabilities of ARCHIBUS and ArcGIS Server. The state-of-the-art system features an Arabic language interface and also incorporates the Arabic lunar calendar.

The solution’s main component is an enterprise, Web-based Rich Internet Application (RIA) that automates the management of the entire lifecycle of spaces and related lease information. That process begins with the space pricing process that utilizes rules-based calculations, continues to the lease creation and pricing that complies with the national laws and regulations and strict regulatory procedures at GACA, and then addresses lease activation, revision, audit and termination. The system also displays CAD-based floor plans and the spaces inside the buildings, classifying them and showing their usage and current utilization rates.

Comprehensive Space and Lease Insights
This integration of ARCHIBUS and GIS technologies now allows GACA DA business development experts to have comprehensive insight into their leases, as well as their interior and exterior spaces and their uses. It also assists them in the decision-making process by providing not just information about the current state of their portfolio, but also shows forecasts for future utilization and demand throughout the Kingdom of Saudi Arabia.

Just as important, GACA is now able to automate tariff administration, make GIS-based analyses and decisions, and benefit from a comprehensive data warehouse for all airport-related information.

Using ARCHIBUS, GACA now has a unified, integrated, and highly automated environment for managing its extensive airport facilities