

March 2009

Hot Topics

- ▶ NetLine/Sched Slot Manager: Great support in a giant puzzleSystems
- ▶ Lufthansa Systems launches new features of Lido eRouteManual

News

- ▶ V Australia opts for Lido navigation solutions
- ▶ Sterling Air relies on Lido FMS

800

A total of 70 million transactions are carried out in our data center each day - more than 800 per second. The data center is one of the most modern and powerful in Europe. It enables passengers to check in using kiosks or mobile devices, airlines to plan their flights efficiently and pilots to fly virtually paperless.

Hot Topics

NetLine/Sched Slot Manager: Great support in a giant puzzle

Smart IT from Lufthansa Systems manages valuable departure and arrival slots

The most valuable assets of an airline are its aircraft. Intangible yet also very important and valuable are its slots, or the allocated arrival and departure times at airports. These are scarce, because nearly all major airports operate with limited capacity. Frankfurt, London Heathrow, New York JFK, Tokyo Narita and many other airports face constraints in terms of aircraft movements or passenger numbers. As a consequence, many airlines treat slot management as an essential task handled by dedicated departments. Lufthansa Systems has created a sophisticated slot management product as part of its NetLine/Sched schedule management solution. It ensures that an airline uses its slots as efficiently as possible while maintaining the flexibility to change its schedule or add new flights as the market permits.

Slots are closely linked to an airline's flight schedule. A flight can only be operated if the airline possesses the corresponding slots at both the originating as well as the destination airport. However, not all flights operate at the same time every day throughout the year. Some flights only operate on certain days of the week, others are moved forward or backward when daylight savings time begins or expires. These and many other factors can trigger changes in flight schedules. Extra slots need to be obtained for special flights during trade fairs or sports events. And every individual change needs a new coordination of slots with a national authority called the slot coordinator. On the other hand, if an airline does not operate the flights as planned for at least 80 percent of the year, it runs the risk of losing the valuable slots to the competition. The airline slot management specialists require a powerful tool as they handle more than a million individual changes every year in an international network carrier.

The Lufthansa Systems NetLine/Sched Slot Manager and the related Slot Monitor enable the airlines to perform several important tasks. They contain an overview of current slots and their usage as well as a history of the entire communication with the national slot coordinator which is important for the documentation of the process. The Slot Manager also collects the schedule changes made in the airline's scheduling system or operations control and generates the corresponding change requests to the slot coordinator.

Once feedback is received, the Slot Manager handles and feeds it into the scheduling system so that the individual changes can be treated as confirmed and the airline can adjust its operational plans and inform passengers.

This is all possible thanks to the close interaction between the Slot Manager and NetLine/Sched and NetLine/Ops, the scheduling and operations control solutions. Also, complex flight planning scenarios can be evaluated for available slots internally before being communicated.

The NetLine/Sched Slot Monitor performs the important task of warning planners if usage of individual slots falls near the 80 percent mark so that measures can be taken to avoid loss of this slot. Twice a year, slots are allocated based on the usage rate within the past season. Every airline can re-apply for those slots that it used more or less permanently. Planners use the Lufthansa Systems tools to check the historical data and apply for the new season.

Complex as slot management may be, the NetLine/Sched Slot Manager and Slot Monitor provide valuable support and make slot management more efficient. They are among the world's leading slot management solutions. Major international customers include network airlines, low-cost carriers and cargo airlines. This diversity combined with the many regional distinctions for slot management indicate the high flexibility of the product. Consequently, the NetLine suite is easily adaptable to our customers' needs. Saving time and overhead costs, this makes life much easier - for the airlines and their planners.

Lufthansa Systems launches new features of Lido eRouteManual

Lufthansa Systems introduces new features of its electronic navigation charts Lido eRouteManual. With the new release of the innovative IT solution, pilots benefit from a fleet independent solution, additional data and improved usability.

Lido eRouteManual is available for any type of aircraft – from commercial to regional jets. Lufthansa Systems now offers its navigation charts in both, landscape and portrait orientation. This is one of the prerequisites for the use on an electronic flight bag in regional jets or integrated into a Class 3 EFB solution because some displays are mounted for portrait use, e. g. in Embraer jets with smaller cockpits. In addition, the graphical user interface now offers configuration options to individually adapt the look and feel of the application for different EFB's, in landscape and portrait mode.

Lido eRouteManual includes airport taxiway charts, approach and takeoff charts and a seamless worldwide route chart. The solution allows panning and zooming into the chart to the level of detail needed in all modes. Cockpit crews can easily determine the level of detail presented by the charts. For enroute charts, the required information is automatically filtered by the application. Depending on the zoom step chosen, information is presented either in detail or reduced to key aspects. As a result, pilots can simply choose the level of detail according to their own needs and have all necessary route information at their fingertips at all times.

Lido eRouteManual displays individual approach and departure patterns for the various airports with all relevant information. One of the new features now allows pilots to select the direction of their exit or entry to an airport. That way only the relevant departure or arrival procedures for the selected direction are displayed. In addition, the minimum safety altitudes along departure and approach paths are presented in such a manner that pilots can see them at a glance. Highlights of the charts, which are drawn to scale and are oriented magnetic north up, include a clean and uncluttered design, clear color-coding and self-explanatory symbols.

With the newest release of Lido eRouteManual, so called temporarily valid charts (TEMPO charts) which are part of the current data cycle, are included as well. This reduces the number of updates necessary to keep the database up-to-date. In addition it makes procedures which were recently valid and replaced by a current TEMPO chart, still available for consultation in case air traffic control requests pilots to fly them, e.g. due to a delay of an airport construction, that was announced already.

Lufthansa Systems also improved the usability of Lido eRouteManual. A double-click is a helpful, established shortcut for activating functionalities of an application. But to click the same point on a touchscreen twice is sometimes challenging, e. g. during turbulences. Therefore Lufthansa Systems integrated an additional configuration for mouse-click behavior: only if the time difference between two clicks is shorter than a predefined and configurable value, the system accepts it as a double-click.

Airlines worldwide rely on the electronic navigation charts from Lufthansa Systems. The continually growing customer base for Lido eRouteManual includes renowned airlines such as Air Berlin, Emirates, Lufthansa and Swiss.

News

V Australia soaring across the Pacific with navigation solutions from Lufthansa Systems

Virgin Blue's new international airline chooses market-leading IT solutions

Virgin Blue's new long-haul airline, "V Australia", successfully launched flight operations in February with industry-leading navigation products from aviation IT specialist Lufthansa Systems. The airline will use Lido RouteManual navigation charts for its air and ground navigation purposes. The carrier has also chosen the Lido FMS Navigation Database Service for the central flight management of its growing fleet. In addition, V Australia opted for Lido eAPM, the electronic aircraft performance monitoring solution. The continuous monitoring of the individual performance parameters of each aircraft enables the airline to save fuel and increase revenues due to a higher cargo capacity.

Scott Swift, Executive General Manager V Australia, commented on the airline's decision, "We have chosen a provider for our navigation and performance monitoring requirements whose products have a proven track record in the industry."

For Lufthansa Systems the contract with V Australia is another milestone of its growing presence in Asia and the Pacific. "Our customers in the region include passenger and cargo airlines, regional and long-haul carriers, full-service and low-cost operators. V Australia will be a valuable part of our customer base as it underlines the advantages of our solutions for any kind of carrier. This is especially true as the envisaged rapid increase in their fleet and network requires IT solutions that flexibly grow with them," said Norbert Müller, Senior Vice President Sales Asia/Pacific at Lufthansa Systems.

Sterling Air relies on FMS data from Lufthansa Systems

The Danish airline Sterling Air operates its European medium-haul flights with Lufthansa Systems' comprehensive navigation data for cockpit systems. Sterling Air recently signed a five-year contract for the use of the Flight Management System (FMS) database.

The FMS database contains all important route information including altitude and airport data for optimizing routes and supporting autopilots on board modern aircraft. The navigation data, which are based on global aeronautical information, are updated and organized monthly and can be customized to specific routes and for the use in any type of aircraft. The FMS database also contains important data to ensure the most efficient engine power levels, ultimately resulting in fuel savings. Lufthansa Systems can thus meet the requirements and needs of airlines.

Sterling Air evolved from the acquisition of Sterling Airlines by Cimber Air. The Danish airline resumed its operation in January 2009. Recently, Sterling Air put two Boeing 737 aircraft into service for medium-haul flights within Europe. The company plans to be operating with a total of six Boeing 737 by the end of 2009. Sterling Air headquartered in Sønderborg and Copenhagen, Denmark, cooperates with Lufthansa and SAS.

Meet Lufthansa Systems

If you would like to talk to one of our IT experts about any specific solution in detail, we would be happy to coordinate a meeting. You can find us at the following events:

Name of Event	Date, Location	Solutions presented
Spring CASMA Conference 2009	March 23-25, 2009 – Dallas, TX, USA	NetLine/Plan