Timing is everything, especially at Lantheus Medical Imaging, Inc. (Lantheus) where made-to-order sterile diagnostic radiopharmaceutical products require manufacture and delivery within a single day. As the radioactive components comprising these imaging agents begin to decay from the moment of manufacture, a complex supply chain ensures that products reach patient care facilities within this limited window of time. Any process interruption or deviation significantly impacts product quality, business efficiency, and customer service.

Overseeing the critical communications infrastructure that enables Operations, Quality, and Commercial teams to effectively manage the logistical complexities at Lantheus is the responsibility of Derek Rhodes, Ph.D., Chief Information Officer. He ensures that the varied communications elements mesh as seamlessly as possible. BT assists Dr. Rhodes in this endeavor by providing and managing the global data and voice network on which he depends, a network that must be functional, secure, and reliable.

Our products make a real difference in people’s lives. They’re used for cardiovascular imaging, a tool that assists healthcare professionals in detecting heart disease in their patients. As the diagnosis of cardiovascular disease typically leads to a treatment regime that may include surgical intervention and/or lifestyle changes, accurate disease detection is extremely important.”

Derek Rhodes, Ph.D. Chief Information Officer, Lantheus Medical Imaging
Case study
Lantheus Medical Imaging, Inc.

“IT’s something of a cliché that outsourcing lets you focus on your core business, but in our case it’s absolutely true. Without the excellent all-round support we get from BT Global Services, it would be difficult to stay at the top of our game.”

Derek Rhodes, Ph.D. Chief Information Officer, Lantheus Medical Imaging

BT outsourcing services ensure integrity and viability of vital Lantheus Medical Imaging supply chain

Challenge
Lantheus Medical Imaging, Inc. (Lantheus) is a global leader in the development, manufacture, and distribution of diagnostic imaging agents used primarily in the diagnosis of cardiovascular disease.

The Lantheus supply chain and delivery management system is a just-in-time business, as a number of its leading products have a finite shelf life. For example, Lantheus’ Technelite® (Technetium Tc99m Generator) generators utilize molybdenum-99, which has a half-life of only 66 hours, therefore requiring just-in-time product manufacture. The supply chain, from ordering the raw material through formulation and packaging, has to be precisely timed to meet specific customer requirements.

Once a division of the biopharmaceutical giant Bristol-Myers Squibb (BMS), Lantheus was spun off as a standalone entity in 2008. The new company needed to be fully operational, with hundreds of systems up and running on a new infrastructure. Fortunately, Lantheus was able to replicate the BMS outsourcing arrangement with BT Global Services, saving a great deal of implementation effort. In addition, Lantheus worked closely with several BT Advise consultants to coordinate IT-related start-up projects on critical work streams.

“Until the divestiture, we were simply a consumer of BMS network services,” recalls Dr. Derek Rhodes, CIO at Lantheus. “However, the fact that there was an outsourcing agreement in place meant that equipment records were complete and up-to-date. This helped greatly in transferring the circuits and IT assets to Lantheus.”

Solution
Today, a BT IP Connect global network platform links the Lantheus headquarters in North Billerica, Massachusetts, to five sites in Canada and two sites in Puerto Rico. This BT infrastructure is the foundation for an extensive range of managed services – including security, mobility, and IP voice – creating the required fast, reliable connections. Lantheus sites in Australia also access the corporate network securely using a BT internet-based secure socket layer/virtual private network (SSL/VPN) service.

Complementary to that arrangement, managed security services for Lantheus include BT Assure Managed Firewall and BT Assure Threat Monitoring. In addition, BT Diamond IP ensures that two vital functions, IP address management and domain name system (DNS) management, are carried out automatically and transparently for Lantheus.

“IT’s something of a cliché that outsourcing lets you focus on your core business, but in our case it’s absolutely true,” says Dr. Rhodes. “Without the excellent all-round support we get from BT Global Services, it would be difficult to stay at the top of our game.”

In relation to Lantheus’ Technelite® generator, standing orders make up the majority of product sales. A smaller number of orders come into the Lantheus contact center at any time (usually by phone) and often require next-day delivery. Any processing delay could result in the waste of valuable materials and loss of revenue to the company.

North Billerica is close to Boston in the northeast, a part of the US that’s known for unpredictable and, at times, severe winter weather. Lantheus contact center agents must have the ability to work from home to maintain the flow of urgent orders from hospitals, imaging facilities, clinics, and radiopharmacies. In support of this need, BT Inbound Contact services supplies freefone and non-geographic numbers to both the contact center and the agents’ homes. Agents utilize contact center client software on their home computers and connect securely to the corporate application via Virtual Private Network (VPN), enabling order entry into the company’s enterprise resource planning (ERP) application.

Lantheus also uses bolt-on ERP tools to maintain regular and close contact with freight and air suppliers, regulators, and the US Federal Government. The software and the network on which it runs must always be available. “We’re in communication across the network, from order to delivery, the entire time,” advises Dr. Rhodes. “The integrity of the network is absolutely paramount to our supply chain. There can’t be a break.”

Multiple managed services are layered onto the BT IP Connect global network, starting with BT Connect Acceleration. This wide area network (WAN) acceleration solution is based on Riverbed technology and enhances the performance of critical enterprise applications, including the company’s ERP system. Built-in redundancy adds resilience to the network design, and BT Global Services provides break/fix maintenance from its network operating center in New Jersey. BT also provides a single-point-of-contact helpdesk to Lantheus and manages the company’s interface with third-party service providers.
The change management consulting we receive from BT Advise is just as important as the outsourcing services, and we value both highly. BT continues to provide support at pivotal points in our development.”

Derek Rhodes, Ph.D. Chief Information Officer, Lantheus Medical Imaging

## Value

BT, a proven, skilled, and responsive service provider, has provided Lantheus with the framework and tools to manage the complexities of its time-sensitive supply chain. With agents working just as effectively from their homes as in the office, there are no delays in order entry. The flow of business communications remains consistent as Lantheus users have the ability to access the corporate network from any location on a variety of devices. Lantheus currently uses the BT Enterprise Connect managed mobility service to link users securely via dial-up and Wi-Fi, providing agility and flexibility in an evolving workplace.

BT One Voice, another managed service, provides Lantheus with the ability to use legacy phone and contact center systems, IP-based systems, and local area networks (LAN). The company’s investments remain protected, and Lantheus can migrate to an all-IP environment at a scheduled pace. In the future, Lantheus will have the ability to switch to the multimedia offerings of unified communications to integrate the supply chain with mobile and customer relationship management (CRM) environments, further enhancing these links.

Lantheus has developed a constructive relationship with BT Advise, a collaborative service that assists BT business partners in developing future strategies and network design. “The change management consulting we receive from BT Advise is just as important as the outsourcing services, and we value both highly,” concludes Dr. Rhodes. “BT continues to provide support at pivotal points in our development.” Immediate plans include moving to a web-based conferencing system hosted by BT Global Services, completely replacing legacy videoconferencing facilities.

In conclusion, the intelligent BT network brings data, voice, video, mobility, and teleconferencing onto the same platform for Lantheus, resulting in valuable cost savings and a dependable network infrastructure with greater simplicity.

## Core services

- BT IP Connect global fully managed service
- BT Connect Acceleration using Riverbed WAN optimization technology
- BT Enterprise Connect, enabling secure remote access for mobile workers
- BT One Voice
- BT One Enterprise, site-based managed LAN and IP telephony systems
- BT Diamond IP managed IPControl™ IP address management
- BT Assure Managed Firewall and Threat Monitoring
- BT Inbound Contact global
- BT Advise professional services