



# **Mellanox Global Professional Services**

## **User Guide**

Rev. 1.2

[www.mellanox.com](http://www.mellanox.com)

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# 1 Global Professional Services Overview

Mellanox Global Professional Service (GPS) provides immediate business benefits helping to ensure rapid adoption and maximum utilization of high performance computing and data center solutions. Corporate IT managers know the challenges of introducing new technology to their networks. Mellanox's consultants and engineers bring substantial expertise in fabric design, configuration and deployment as well as in application communications and tuning, allowing you to leverage Mellanox solutions to get the most out of your application infrastructure.

## 1.1 Core Proficiency

- Maximize ROI by ensuring the most efficient solution
- Experts in fabric design, configuration and deployment
- High-end professional team
- Faster time to production GO-LIVE
- Knowledge and skills transfers
- Proven worldwide credentials

## 1.2 Mellanox offers End-2-End Service

- Installation services
- Education and Training
- Consultancy and Residency Services
- Remote Network Operational Center (NOC) services
- Apprenticeship Program
- Development Services

## 2 Experience

Mellanox's GPS consultants and engineers are experts in Mellanox products and solutions, InfiniBand technology, 10/40 GbE Ethernet solutions, application performance tuning, and protocol stacks such as MPI, TCP/IP, RDMA, and Storage. Mellanox has been a leading member in the Open Source communities for InfiniBand, RDMA, MPI and iSCSI implementation since its inception. This experience can save time and money and help you maximize the return on your investments by ensuring the most efficient solution.

Customers can expect high quality of service. Our field service engineers are highly trained as subject matter experts in order to perform the following tasks:

- Perform all installations, configuration, maintenance, and troubleshooting for new and existing Mellanox products at Mellanox's customer site, according to Mellanox standards and procedures.
- Reporting and timely escalation of all observed issues to relevant Mellanox operational escalation contacts.
- Developing and/or conducting onsite knowledge transfer sessions for our customers.
- Assisting customers with in-house testing, utilization, and fabric internal certification process.
- Documenting technical and operational procedures clearly and concisely.

Mellanox's Field Service engineers have analytical as well as interpersonal skills and teamwork ability.

Mellanox's Field service engineers have multiple years of experience in networking with strong technical understanding and appropriate skills for Mellanox solution integration and debug.

Mellanox's Field service engineers have the relevant computer engineering education along with relevant commercial networking industry certification.

### 3 Deployment Services

Mellanox Global Professional Services provide expert resources to perform a full installation with a customized plan for delivery on crucial installation tasks and requirements. This service is built by selecting one of our standard deployment services, including everything from full hardware and software installation and cabling to fabric cleaning and benchmark testing. As the installation is successfully concluded, full cluster documentation and technical knowledge transfer is delivered to the customer's network administrators. Network Installation On-Site conducted according to a detailed Statement of Work (SOW) is designed to meet specific requirements and ensure that the Mellanox solution is fully integrated, and the customer's needs are fully met upon completion of the service. The installation services are sold as 3, 5, 10, 15 day packages by SOW, and are also available as an onsite N week's pool.

Example of deployment services Statement of Work may include the following items (SOW is subject to changes and customizations)

<b>Done by Mellanox</b>	
Install Mellanox modules into the Mellanox switch chassis.	Bring Up
Cluster cabling and labeling	Bring Up
Upgrade firmware and software to Mellanox components.	Bring Up
Install Host drivers	Bring Up
Install UFM	Bring Up
Perform UFM and or Switch network configuration	Bring Up
Performance validation and tuning	Validation
Run fabric diagnostic	Validation
Perform chassis hardware validation	Validation
Perform Pre-Production validation checklist	Validation
Perform On site Knowledge Transfer	Knowledge Transfer

## 4 Remote Bringup Services

Mellanox Global Professional Services provide expert resources to skillfully assist in bringing up your cluster via remote access. A GPS engineer will validate your cluster network scheme as implemented, validate Mellanox Switch software and firmware, verify configuration and perform a fabric health check, and ensure your cluster is operational and error free. Upon completion of the audit, a review of cluster best practices will be delivered to the customer's staff.

The remote bring up service is available for purchase by SOW. This contract can be per project or, per person per day, with the term of the contract minimum of 2 days.

## 5 Remote NOC Services

Mellanox Global Professional Services provide scalable and cost effective remote NOC (Network Operation Center) network management and monitoring services. You get a dedicated Mellanox person working in the customer time zone and customer production, constantly monitoring the production environment on a virtualized PC infrastructure – his Desktop is as if he is at the customer office.

The service engineer is part of the your operations team and takes the lead on the following activities

- Level 1,2,3 and Support
- Ongoing Fault and Trouble Management
- Trouble Reporting and Management
- Fault Analysis and Reporting
- Performance Monitoring – Alarms and Real Time.

The remote NOC service is available for purchase by SOW. This contract can be per project or, per person per day, with the term of the contract either monthly, quarterly, or yearly.



## 6 Residency and Consultancy Services

Mellanox Global Professional Services offer On-Site network administration. We send our experienced and certified engineer to come to your location and work from your offices. These engineers are highly skilled, well trained and experienced with Mellanox products and proficient in

- application infrastructure performance
- optimization and tuning
- monitoring solutions integration
- End-2-End solution deployment
- knowledge transfer
- documentation

Mellanox on-site residency can bring unmatched performance to your solution.

Among the Benefits:

- Custom assistance based upon your unique environment and requirements.
- Direct access to Mellanox's experts for engineering-related inquiries.
- Full ROI through efficient implementation.
- Knowledge transfer to your personnel.
- Augment in-house development teams.

Residency service is available for purchase by SOW. this contract can be per project or, per person per day, with the term of the contract monthly, quarterly, or yearly.

Example of Residency services Statement of Work may include the following items (SOW is subject to changes and customizations)

<b>Network Administration SOW details done by Mellanox</b>	
Install, configure , diagnose, validate, tune all on-site Mellanox products.	Operational Network Management
Ensure availability of Mellanox network equipment through system design, implementation and maintenance. Respond to and correct faults as they occur.	Operational Network Management
Support Network Administrator in resolving second level network problems. Work with Mellanox support to Resolve third level network problems, calling in third parties when necessary.	Provide second and third level support for Network services
Work with Mellanox Back office to provide access to systems level information for users. Work with Mellanox back office to assist with items related to Mellanox technologies and applicable 3 <sup>rd</sup> party technologies.	Echo Support Group with infrastructure technologies
Keep abreast of Mellanox product changes. Evaluate new Mellanox product code in development lab and advise the customer of possible advantages for new product code.	Advise on Mellanox policy and network enhancements
Support internal Network administrator in resolving level 1-2 problems.	Overall responsibility for technology data communications
Develop a customized documentation set, including but not limited to technical guides and task oriented guides.	Documentation Duties
Implement UFM API integration to the relevant monitoring and capacity tools.	Other duties

## 7 Development and Customization Services

Mellanox Global Professional Services offer application development, code review, code porting and performance tuning by highly skilled engineers, trained and experienced in optimizing application infrastructure performance. Performance criteria will be set in consultation with GPS experts in order to define benchmarks tailored and tweaked to your specific environment and applications capacity. Mellanox Engineers' experience in RDMA, applications acceleration and MPI can bring unmatched performance to your solution.

### Benefits

- Tailored services based on your unique requirements.
- Direct access to Mellanox's experts for engineering-related inquiries.
- Full ROI through efficient implementation.
- Knowledge transfer to your personnel.
- Augment in-house development teams.

Development and customization services are available for purchase by project SOW. This contract can be per project or, per person per day, with the term of the contract either monthly, quarterly, or yearly.

## 8 Terms and Conditions

### 8.1 General Service Delivery

Mellanox service prices will be provided by Mellanox sales prior to purchase delivery. Mellanox will provide appropriate delivery according to Mellanox scheduling. No professional Service dates will be scheduled without a purchase order number or Mellanox approval. Mellanox prices may be adjusted by Mellanox at any time without notice. Customer is responsible for all duties and taxes, imposed upon the sale, license, purchase, delivery, possession or use of Mellanox services. Customers are responsible for their own telephone and internet service provider charges associated with the use of Mellanox service and these are not included as part of the price. Payment must be received in advance of delivery of any Mellanox services.

### 8.2 Rescheduling Policy

Professional Service dates may be rescheduled by sending an email request to [pro-serv-admin@mellanox.com](mailto:pro-serv-admin@mellanox.com) no less than fourteen (14) business days prior to the class start date. Mellanox will work with the customer to establish a new professional service schedule based on the resources availability.

### 8.3 Cancellation Policy

Mellanox reserves the right to cancel or modify any Mellanox service at its discretion. Customer agrees to comply with Mellanox's registration/cancellation policy.

#### 8.3.1 On-site Service Cancellation

Cancellations will only be accepted in writing via postal mail or e-mail. If a service is cancelled for any reason, the following cancellation charges will apply:

- More than 25 days before the agreed date of the course: no charge
- Less than 25 days but more than 15 days: 50%; less than 15 days: 100%

Refunds will not be made for cancelation without notification.

### 8.4 Payment Method

Payment in full is required 14 calendar days prior to start date of any Mellanox professional service engagement. Accepted payment methods are credit card, or company purchase

Credit Cards: We accept American Express, Master Card, and Visa Card. Contact our professional service administrator to submit payment. Have your account number and expiration date ready when you phone in your registration.

Purchase Order (PO): Fax a copy of your purchase order to [orders@mellanox.com](mailto:orders@mellanox.com)