Total Cost of NMS Ownership Comparison

These days there is no need to emphasise the importance of effective and scalable network management and monitoring solution (NMS). Every company with network infrastructure needs one.

When companies are looking at NMS product offerings from various vendors first of all they are looking at:

- **Product License Cost**
- **Product Features**

 Sometimes NMS vendors marketing materials don't really tell the full story, **i.e. they will tell you what their product can do, but won't say at what cost** and conveniently omit following important subjects:

- **Product Implementation Cost**
- **Product Maintenance Cost**
- **Scalability**

The answers to all above questions will determine the **TOTAL Cost of NMS Ownership**.

Quite often product implementation and maintenance costs can outweigh or can be comparable to the product licensing cost, and could become a real burden on your company network operations budget.

Vast majority of NMS vendors split their product offering into multiple modules with seemingly modest price for each module, which creates false perception of affordability of their products.

Let's explore these costs a bit deeper, which will require answers for following questions:

Q: How many separate modules and how many instances of these modules I have to buy to address all my operational and business requirements?

A: Quite often to cover all or most of your operational and business requirements you will have purchase 5 or even more separate modules to take care of following:

- **Performance Monitoring**
- **Configuration Management**
- **Asset Tracking**
- **Server Monitoring**
- **Application Monitoring**
- **Traffic Analyzer**

While each module has licensing limit, in terms of maximum number for monitored elements, where element is generally a single interface you are collecting information from.

Let's say your network consists of 500 routers (4 interfaces per router), 2000 switches (24 ports per switch), 100 Servers (4 volumes per server)

Total number of monitored elements will be

- **Routers: (500 x 4) Interfaces = 2000 elements**
- **Switches: (2000 x 24) Interfaces = 48000 elements**
- **Servers: (100 x 4) Volumes = 400 elements**

Total = 50400 elements.

Non-Enigma NMS Example

In our example we use basic on-line quote from SOLARWINDS Inc for 2000 or unlimited nodes, which does not include Telco Services management, Server and Application Monitoring:

Qty Product ID / Description Unit List Price Sub-Total

- 1 1243 - Orion Network Performance Monitor SLX (unlimited elements-Standard Polling Throughput) - License with 1st-year Maintenance AUD$36,290
  AUD$36,290
- 1 3054 - NetFlow Traffic Analyzer Module for SOLARWINDS Network Performance Monitor SLX - License with 1st-year Maintenance AUD$21,115
  AUD$21,115
- 1 4333 - VoIP and Network Quality Manager IP SLA X, IP Phone X (unlimited IP SLA source devices, unlimited IP phones) - License with 1st-Year Maintenance AUD$15,175
  AUD$15,175
- 1 4106 - Network Configuration Manager DLX (unlimited nodes) - License with 1st-year Maintenance AUD$43,640
  AUD$43,640
- 1 6003 - IP Address Manager IPX (unlimited IPs) - License with 1st-year Maintenance AUD$21,115
  AUD$21,115
- 1 6306 - User Device Tracker UTX (unlimited ports per server) - License with 1st-Year Maintenance AUD$23,930
  AUD$23,930
- 1 5607 - Log and Event Manager LEM2500 (up to 2500 nodes) - License with 1st Year Maintenance AUD$126,495
  AUD$126,495
- 1 3340 - Network Topology Mapper - License with 1st-Year Maintenance AUD$1,890
  AUD$1,890

Quote Total   **AUD$289,650**

The above on-line quote lists 8 different modules, which you have to buy at the cost or nearly **$300,000 dollars**, but the big question still remains:

What it will cost me to implement and maintain my NMS Solution?

Following costs have to be factored in, which are associated product implementation and maintenance:

Hardware: To cover monitoring of 50,000 elements, at least following will be required:

- **2 x Windows 2008 application and database servers**
- **4 x Polling Servers**

We estimate the above cost to be around **$40,000**.

- **HR Cost: Hire of Windows System Administrator and Database Administrator, who will be looking after the windows server environment, applying patches, liaising with Microsoft, salary $100,000 p.a**.

For the solution to be effective, all these 8 modules need to function as a single system and will require some sort of integration between each other as they need to be accessing the same database of nodes, client sites, location, contacts, MAC addresses, VLANs, IP Routes, etc.

The answer is: to hire one or more programmers, who will write integration code or anyway hire a NMS system administrator:

Each programmer or sys admin will cost around **$100,000 p.a.**

So the TOTAL Cost of Ownership SOLARWINDS NMS Solution will be at least:

$300,000 (SW) + $40,000 (HW) + (2 x $100,000 HR) = $640,000 for 1st year,

With at least **$200,000 per annum** after 1st year + support cost.

Above capital and operational expenses can represent significant impact on budget of your network operations.

Enigma NMS Example

Enigma NMS on the other hand, does not have all these "hidden" costs except for the cost of software single license and hardware.

Enigma NMS contains all required functionality within the same product, hence **ZERO** integration cost. You don't have to know anything about Linux server or database administration. Enigma NMS manages and optimizes its own operating systems (CentOS6.5) and database (MySQL) environment. It monitors its own file system utilization and clears the historical data preventing system running out of disk space. It also monitors the health of its database engine and auto repairs any corrupted tables. This self healing functionality reduces maintenance effort to bare minimum or even zero.

Please note: regardless of your network size and complexity our solution will take care of it all using single server instance without the need for additional modules and associated integration overhead.

When purchasing Enigma NMS license, we also offer complementary free secondary license, so our clients can benefit from High-Availability Cluster.

Advanced database design resulted in extremely high scalability, which allowed collection of detailed (60 seconds) statistical data from hundreds of thousands of interfaces from the same single server.

Database size in Enigma is only limited by the size of the system hard disk. We are observing Enigma deployment where database grows to more than 5 terabytes, without any noticeable impact on overall system performance and without dedicated Enigma NMS System Administrator.

Enigma NMS is the ONLY enterprise network management solution where Telco Services are fully integrated and fully customizable. You can manage any number of Telco Services with ability to maintain all attributes for all carriage types. When network outage occurs Enigma will advise you of details of connected carriage, which will shorten restoration time and increase overall network availability. This feature will also greatly help you with getting the most value from your telecommunication budget. You can quickly identify underutilized WAN links and lower their bandwidth without any impact on user experience. Freed up budget can be used to increase access speeds of overloaded WAN services.

Telecommunications Bill Validation module produces nearly instant ROI (Return on Investment). Real-life examples show Telco bill reduction by around 7-8%.

If you require some additional functionality or report we are able to develop it for you in just a few days.

All data in Enigma is kept in the same database, which results in infinite possibilities for creation of any operational or business logic and tight integration between all network related objects.