



VERSATILE Data Mediation Platform

ABOUT US

OSSera, Inc. is a global provider of Operational Support System (OSS) solutions for IT organizations, service planning, service operations, and network operations. OSSera's multi-threaded symmetrically distributed platform fully leverages modern multi-core server hardware to provide higher flexibility, reliability, and scalability for service and resource management solutions. OSSera's products support the TM Forum's suite of standards especially in the area of Service Management, Fault Management, Performance Management, Data Mediation, and Configuration Management.

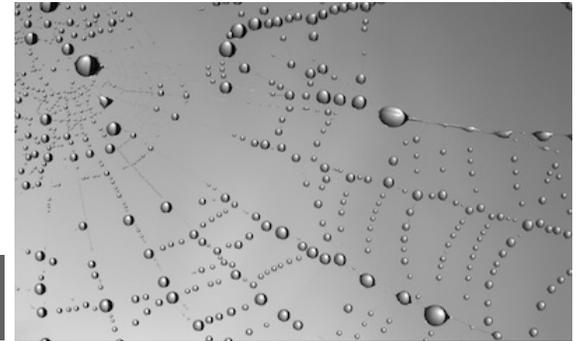


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Member of the
TeleManagement Forum



Data Mediation is required across all functional areas



Problems and Challenges

Data Mediation is a term often used in Billing Call Detail Record processing. Mediation of CDR records for billing and usage purposes is a challenge for many billing systems. However “mediation” is also a problem across all functional areas including Assurance, and Fulfillment as well as Billing.

- **Multi-Protocol** - Data Mediation is required for not just SNMP but often for non-SNMP managed resources. This may require Transaction Language 1 (TL1) over Telnet or TCP/IP. Other protocols may include CORBA or CMIP in communicating with Element Management Systems. Also some data sources may require reading files such as SYSLOGS and some may require reading data from a database.

- **Vendor-Neutral** - Data mediation platforms need to be vendor neutral in that they must allow the Communication Service Provider (CSP) to be agile in selecting the vendor equipment they deploy into their hybrid networks. The platform should be able to normalize all protocols from various vendors into a consistent set of alarms, events, metrics, usage records, and activation steps to properly manage end-to-end networks and services.
- **Load** - Whether dealing with alarms, metrics, usage data, or SYSLOG files volume is usually the downfall of any data collection. The legacy data collection options are usually processor bound and cannot handle huge amounts of data.

Processor bound collection mechanisms are not high performance computing software architectures and there is always a bottleneck in processing performance thus not allowing the collection mechanism to scale and handle GB's of data per day or per hour.

- **Availability** - Data collection must be able to reach 99.999% availability and be completely fault tolerant. This is critical and unfortunately if any data is lost then the OSS is blind to critical service availability issues.
- **Security & Flexibility** - Too often probes, gateways, and adapters are difficult to modify and this is a must with ongoing changes in network resources and functionality. Therefore

often a CSP is hampered with not being empowered to securely change and modify the adapters themselves. Thus costly services are required to build or modify an adapter.

- **Bi-Directional** - Many legacy probes and adapters only collect information. These probes may receive SNMP traps or only process log files. However in any automated system some level of bi-directional command and response is required to ensure heartbeat, to retrieve files, to access a system, to configure, and to enable/disable managed resources. Thus in any fully-automated system bi-directional capability is a must and unfortunately lacking in many OSS solutions.



VERSATILITY
FLEXIBILITY
AVAILABILITY



Our Solution

OSSera's Data Mediation Platform (DMP) is built upon the OSS Explorer Platform.

OSSera's OSS Explorer Platform is unique because of its multi-threaded symmetrically distributed architecture which can support a 99.999% highly available fault-tolerant DMP.

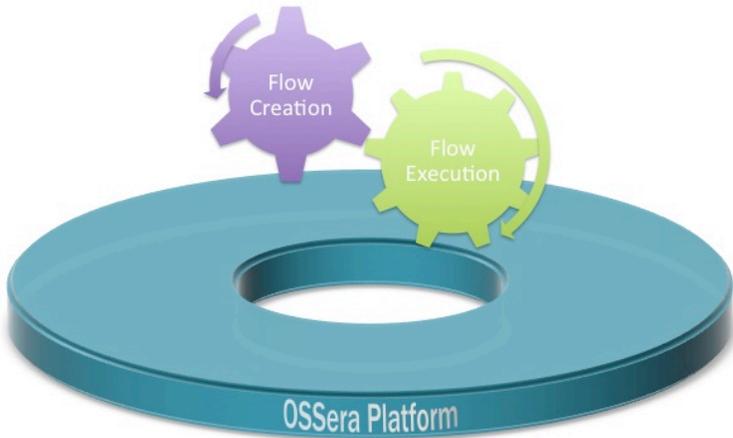
The platform has been designed from the ground up to be fault-tolerant due to its unique ability to distribute processing across a multi-server/multi-core virtualized environment and shift the load transparently based upon available processors and servers.

When two or more servers are used, the OSSera platform will distribute and load balance all processing of data, commands, and responses.

DMP is able to handle disaster recovery, event storms, and maintenance upgrades without skipping a beat. Never lose sight to critical resources and services. Transform your operations to a fully automated mediation platform that enables any OSS application for any TeleManagement Framework business process such as fault, performance, log analysis, troubleshooting, service management, and configuration.



DMP Functional Groups



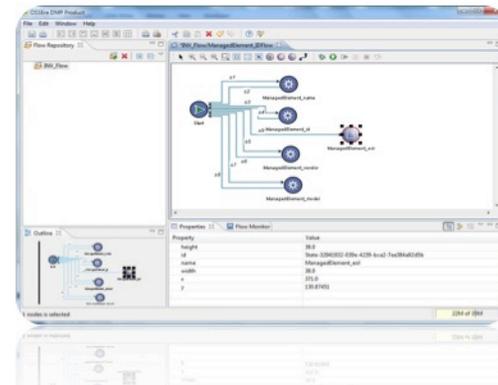
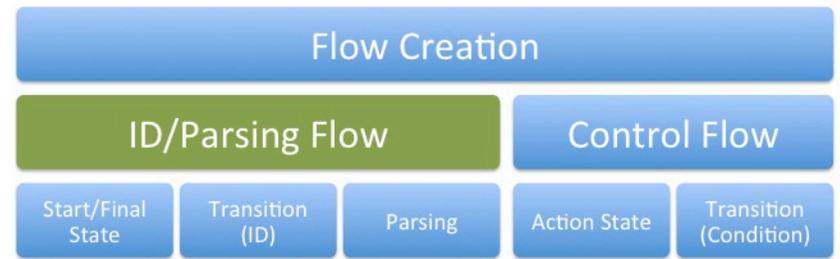
DMP Functional Groups

OSSera's DMP is broken into two user personas or functional groups: Flow Creation and Flow Execution.

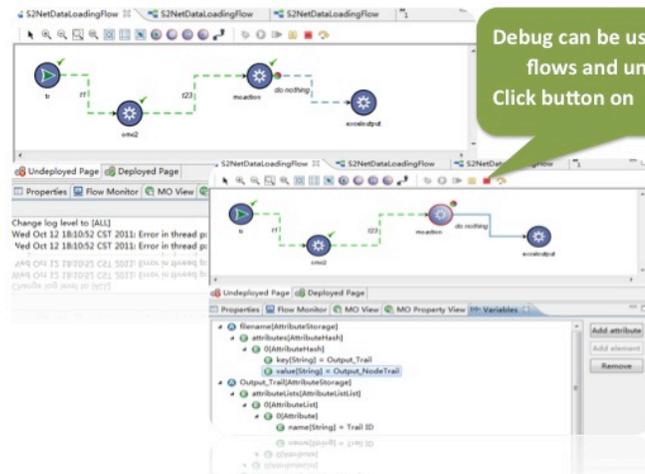
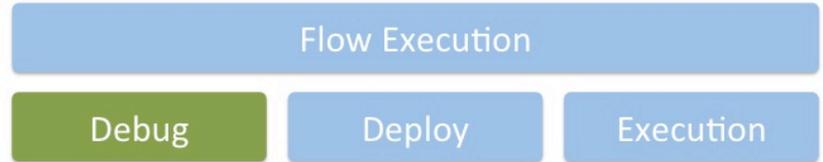
- Flow Creation - Users define the creation of ID/Parse and Control Flows. These flows provide the building block components that are dragged and dropped into a workspace to create flows where data is collected, normalized, and processed - plus where managed resources are configured through commands and responses.

- Flow Execution - handles the debugging, deployment and execution of these flows during runtime. Debugging is critical for making sure data is being processed appropriately. Flows can be stopped, started, and monitored.

DMP provides a highly available, highly scalable, flexible, secure, multi-protocol and vendor-neutral data mediation platform across SNMP, TL1, TCP/IP, CORBA, CMIP, and Telnet.



1. Define start state
2. Define parsing states
3. Define Final states (Optional)
4. Define transitions

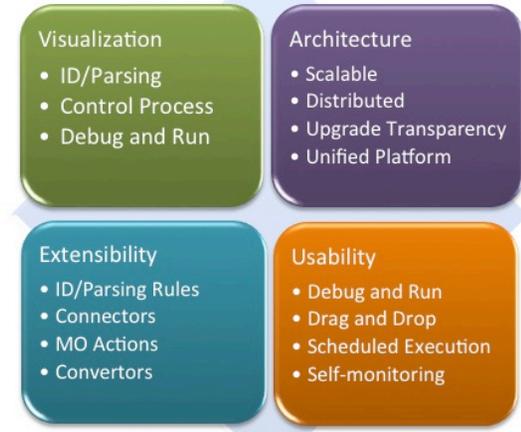


- Debug can be used on deployed flows and un-deployed flows
Click button on



Visualization, Architecture, Extensibility, and Usability

DMP Key Differentiators



Technology and Architecture

OSSera's fundamental architecture can support:

Tier 1 Scalability:

- No loss of events or system performance during an "Event Storm"
- Over 1000 concurrent clients
- N-number of redundant servers

99.999% High Availability

OSSera servers can be configured in a symmetrically distributed configuration. The

fully distributed and load balanced processes require no primary to secondary back-up configuration where operators lack visibility to critical network/service monitoring functions. The runtime processes can be configured along with database clustering to meet 99.999% availability requirements. To summarize:

- Servers are policy enabled and managed.
- Each server can be configured with redundant layers of software components.

- All servers are load balanced and share the duty in serving clients.
- In the case of system failure, surviving servers will automatically redistribute the load to provide the highest system availability possible.

OSSera's Unified Services Framework architecture supports a complete Linux Redhat and MySQL deployment to lower your Total Cost of Ownership.

Also the software can run on your existing investment in Sun

Oracle infrastructure fully leveraging any available hardware processing power.

NOTE: As a member of TMF, OSSera has adopted the TMF specifications on technologies and integration. A technology neutral approach has been followed. The software has been designed to be able to work on different platforms and adapt to technologies that are commonly used by the industry of today. As the technologies evolve, the software can be easily moved on to new technologies.

