



Xynergy

Expertní analytické prostředí pro analýzu radiové
části mobilních sítí

Xynergy



- Enterprise-level, web-based data analytics platform for; Drive Test, Network Management, OSS Call Trace data

Xynergy

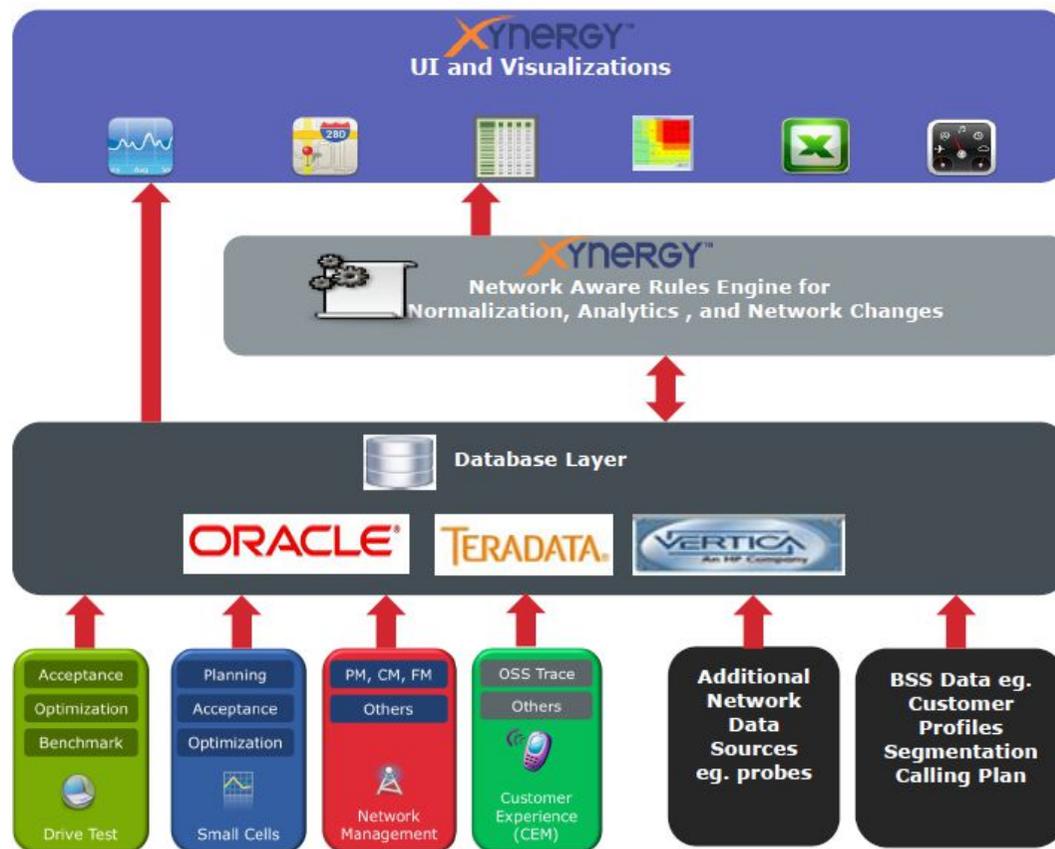
- Supports Automation of key tasks in the network management life cycle
- Multiple Data Sources +
 - Supports multiple data sources such as (but not limited to) Drive Test Data, Performance Management Data (PM – KPI Counters), Configuration Management Data (CM – Parameters), Fault Management Data (FM – Hardware Alarms), Subscriber Data (CEM, OSS Call Trace), etc.
 - Accepts any type of data
 - Probes...
 - Crowd source...
- Technology agnostic
 - Supports all major technologies, including HSPA+, VoLTE and LTE-A
- Vendor agnostic
 - Supports multiple equipment vendors and data formats
- Correlation

Xynergy

- Drive Test
 - Drive Test Optimization
 - Drive Test Benchmarking
 - Drive Test Acceptance
- In-Building
 - Automated processing and Acceptance for large-scale small cells deployments
- Network Management
 - Performance Management (KPI Counters)
 - Configuration Management (Parameters)
 - Fault Management (Hardware Alarms)
- Customer Experience Monitoring (CEM), including geolocation
 - OSS Call Trace data
 - Can accept data, for example, from existing Nemo CEM solution, MDT, etc.
 - Self-Optimizing Networks (SON)
 - Open Loop and Closed Loop

Xynergy

software
architecture



Xynergy – drive test benchmarking

Customer Need:

Tier 1 Operator regions needed a web based benchmarking solution that could be used by teams to analyze baseline and drive test information on a **centralized platform**, analyze the data and **automate the reporting** at the corporate level.

Anite Solution:

Anite's Xynergy platform was selected in 2013 for several regions, and deployed within Operator firewalls for managing their data and optimization needs.

Impact:

The entire region has switched to using Xynergy for all of their drive test processing needs, including processing their entire benchmarking data multiple times a year. The region's **engineers used to spend around 360 man-days per year on processing this data and generating these reports**. As a result of Xynergy, they were able to bring it **down to 100 man-days/year** -- which is an efficiency gain of more than 70%.

Xynergy – drive test benchmarking



Xynergy – acceptance automation

Large Tier 1 Operator needed an **automated solution to validate the acceptance** test results from multiple infrastructure vendors within a defined SLA.

Xynergy was selected to automatically process LTE network acceptance data and generate validation reports, email users on the acceptance status and allow web based analysis.

Impact:

Tier 1 Operator is able to **accept sites and clusters within hours** using the fully automated Xynergy acceptance module **compared to the option of using a large number of resources**. Operator has successfully reduced their resources by automating the entire acceptance process – an efficiency gain of more than 80%.

- Automate, centralize and standardize the end to end process of site, cluster, and system acceptance test report generation, improve efficiency, reduce cost

STATISTICS FOR ONE MARKET							
Total Sites tested		1097					
Number of Attempts Sites were tested	Breakdown of Sites	MANUAL APPROACH	Total Hours spent by the engineer	Total number of days spent by the engineer	AUTOMATION THROUGH XYNERGY	Total Hours spent by the engineer	Total number of days spent by the engineer
		Hours spent analyzing manually and creating reports			Hours spent using Xynergy (Automated analysis and creation of reports)		
No of Attempts(1)	959	2	1918	79.92	0.25	239.75	9.99
No of Attempts(2)	94	4	376	15.67	0.5	47	1.96
No of Attempts(3)	26	8	208	8.67	1	26	1.08
No of Attempts(4)	8	16	128	5.33	2	16	0.67
No of Attempts(5)	5	32	160	6.67	4	20	0.83
No of Attempts(6)	5	64	320	13.33	8	40	1.67
TOTAL			3110	129.58		388.75	16.20
No of Days Saved		114 days = ~ 4 months					

Xynergy – performance module

Customer Need:

Worldwide equipment vendor needed a performance solution that could be used by global teams to **manage the Operator's network by embedding best practices** of key engineers into rules within their software.

Anite Solution:

Anite's Xynergy platform was selected for performance management of the Operator network using rules developed by the vendor's users.

Impact:

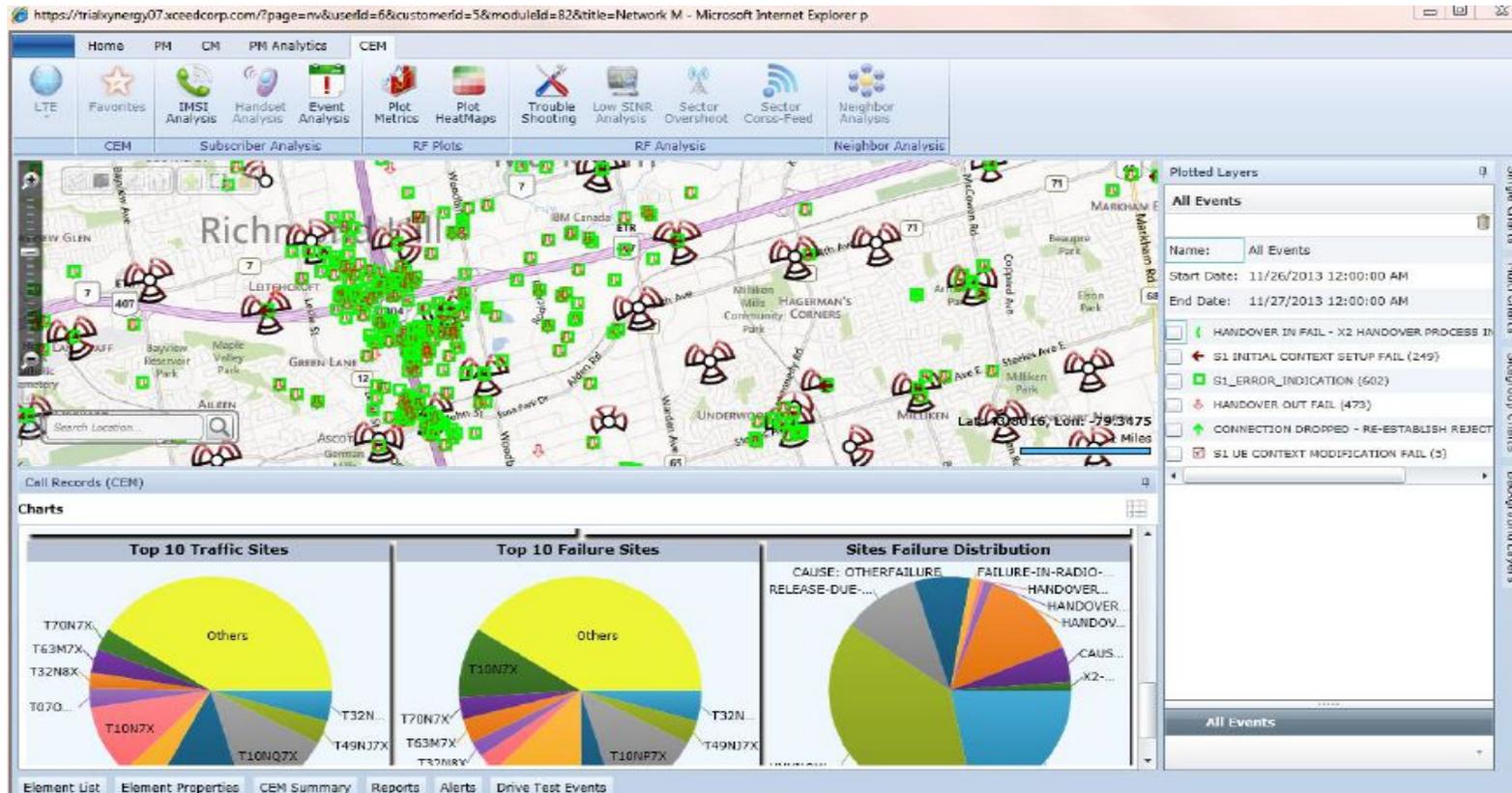
Vendor documented a **60% improvement** in efficiency through the use of Xynergy and the platform is still being used today by vendor worldwide for its managed services, with more than 1000 engineers logging into the system and more than 500 rules running on daily/hourly/ad-hoc basis.

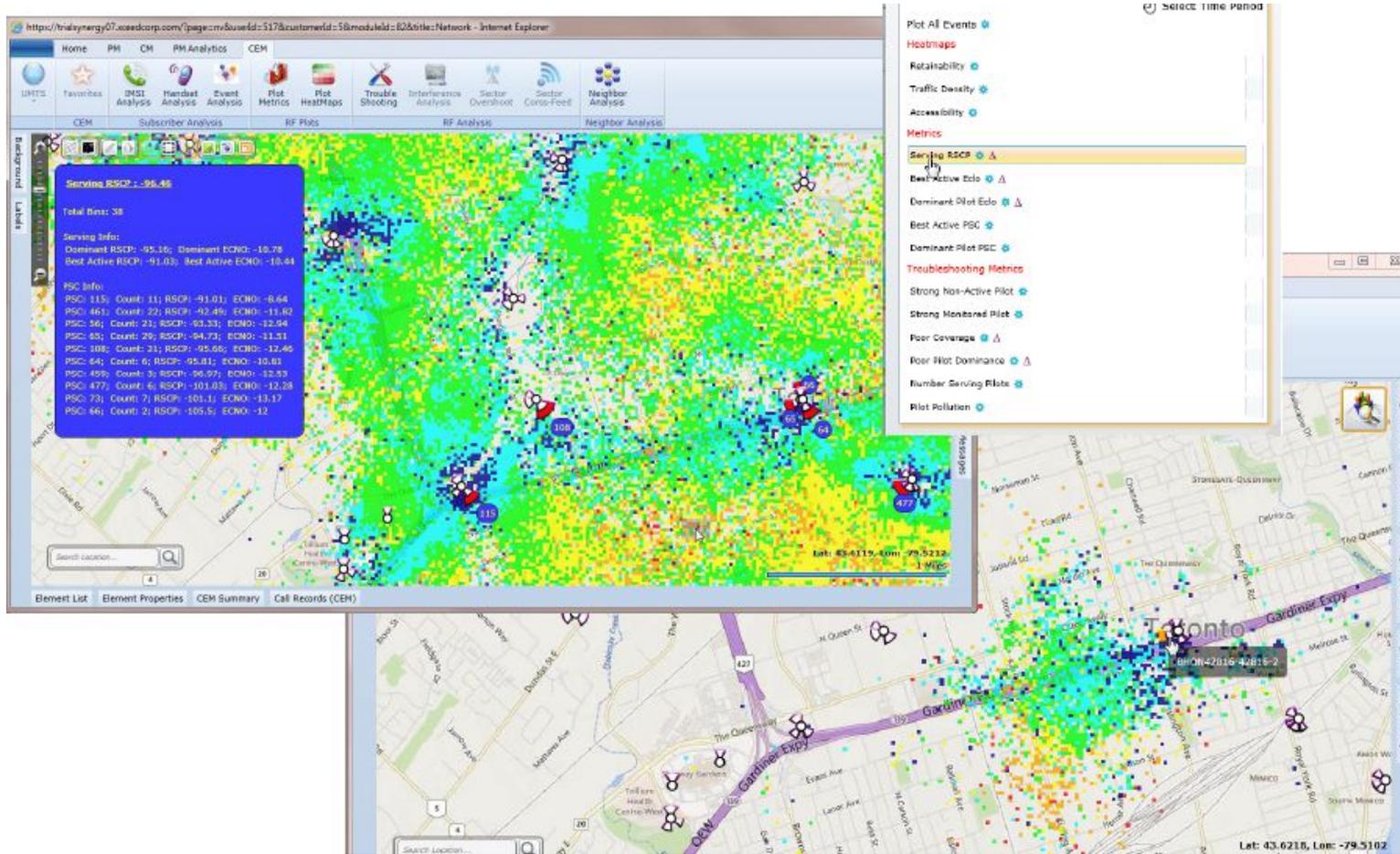
Xynergy – performance module



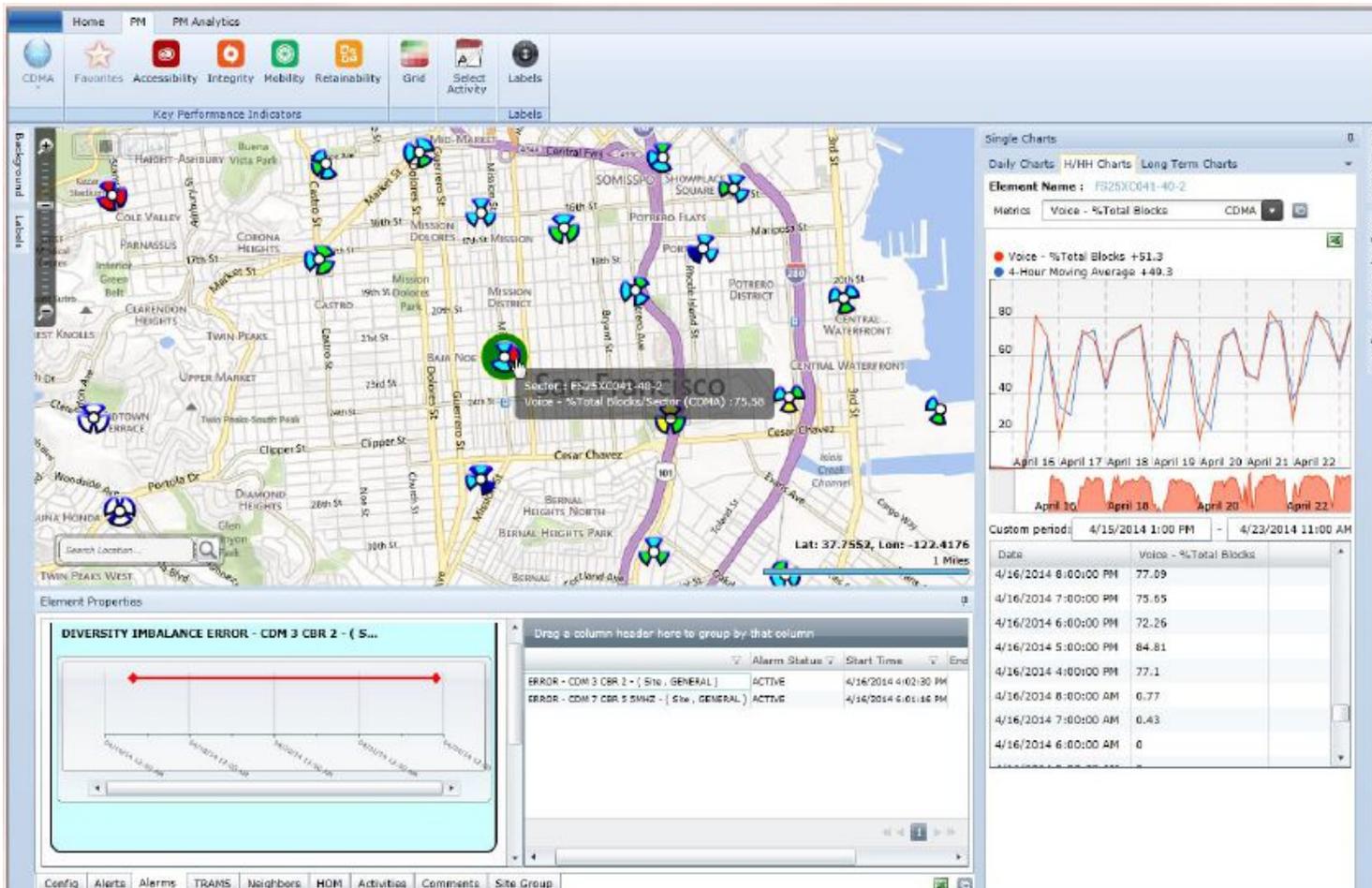
- One of largest, worldwide network equipment providers has been using Xynergy to deliver managed services for network operations of entire nationwide network for Tier 1 operator for the past four years
- Modules used in system are **PM, CM and FM** across 2G, 3G and 4G and across four different equipment vendors
- Has very large user activity from engineers around the world logging into to system to support the services:
 - **Number of unique users on daily basis: 700**
 - Number of unique users on weekly basis: 1100
- Size of system being managed :
 - Number of Markets: 100
 - Number of Sites: ~70,000 (2G: 39K, 3G: 38K, 4G: 30K)
 - Number of Sectors: ~217,000 (2G: 118K, 3G: 117K, 4G: 100K)
- Very large number of data feeds coming into system in near real-time (15 mins, 30 mins, hourly, daily, etc.):
 - Number of Data Sources (feeds) received on a daily basis: 300
 - Number of files loaded on a daily basis: ~60,000
 - Daily Average Intake of Data: 300 GB
 - Number of unique Counters/KPIs received across all technologies on a daily basis: ~56,000
- Significant number of Rules operating on incoming data at multiple frequencies (hourly, daily, weekly, monthly):
 - Total number of active Rules: 800
 - Total number of Job Runs on a daily basis (includes all kinds of Rules): 11000
 - Estimated number of daily Fact table query hits: 2M
 - Number of daily Alert Runs: 9000
 - Number of daily Reports: 1500

Xynergy – CEM sample view





RF optimisation



CM & FM
correlated
view