

Industrial Metrics / Holland LP

Rangecam Track Analyst **Enterprise**

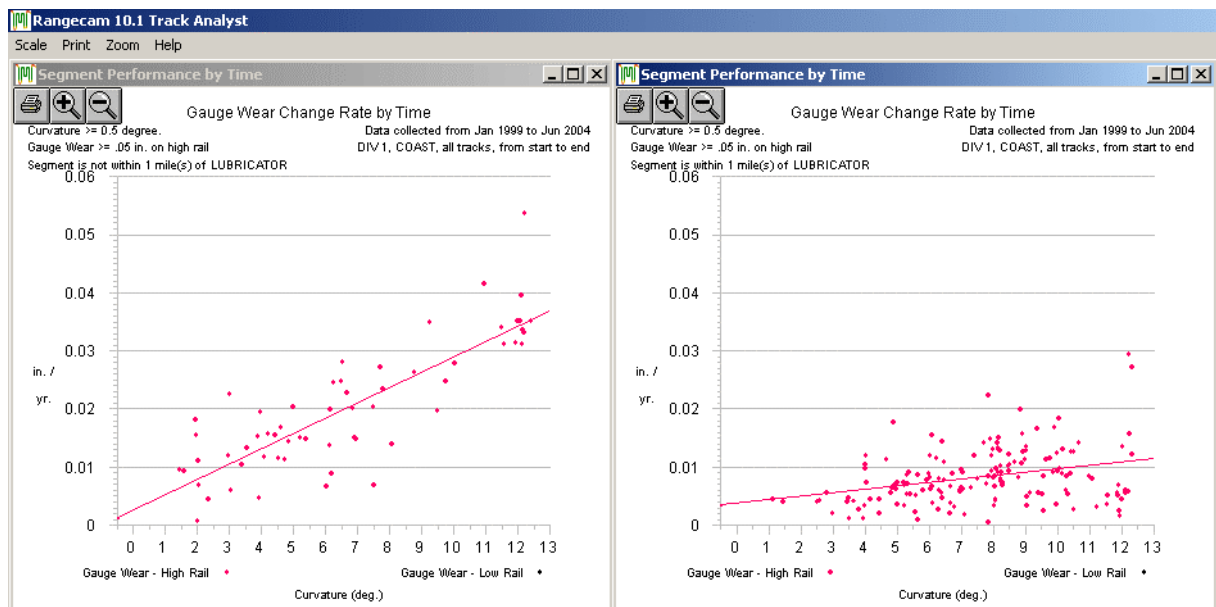
Enterprise-scale Software for
Track Engineering



What is Track Analyst Enterprise?

Track Analyst Enterprise includes *all* features — planning tools, queries, charts, reports and GPS-based mapping capabilities — in IM’s desktop Track Analyst and Track View products. The difference is that Track Analyst Enterprise connects to an “enterprise-scale” Oracle or MS SQL Server database, while the desktop version connects to a Microsoft Access database. The MS Access database is limited to two gigabytes, which is enough to store about 200 miles of rail profile and geometry data if historical runs are included. An Oracle or SQL Server can comfortably manage the terabytes of track test data that a Class 1 railroad might acquire over many years.

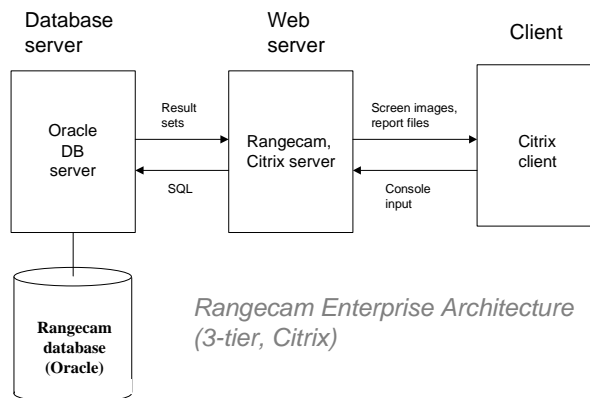
Combining all of a railroad’s track test data in a single database yields additional value in the form of system-wide analysis and reports. A history of track geometry, GRMS, rail wear and rail flaw testing is a data mine from which analysis tools can extract degradation rates and other valuable information — the kind of information on which railroads can take action to optimize track engineering practices, extend rail and tie life and cut fuel consumption.



Comparison of rail wear rates in curves further than 1 mile, and less than 1 mile, from a wayside lubricator.

Architecture

Rangecam Enterprise can be deployed as a two-tier client-server application. In this case, Track Analyst is installed on users' computers, and the database resides on a corporate server. Alternatively, multiple instances of Track Analyst can run on a central web server in a three-tier configuration. In this case, users connect over the Internet or a corporate intranet, and no application software is needed on client computers.



Loading the Enterprise Database

The Rangecam Office System is used to upload data to the Enterprise database. Initial data processing and cleanup is done using Rangecam Office in standalone databases. This reduces the load on the Enterprise DBMS and avoids confusing end-users with incomplete or unaligned data. Only clean, processed data that has passed all quality checks is stored in the Enterprise database for use when making engineering decisions.

Why Track Analyst Enterprise?

Advantages of Track Analyst Enterprise include:

System-Wide Reporting

System-wide queries and reporting become possible when all of a railroad's track test data is combined in one database. Reports at the subdivision or division level, or for the entire railroad, can be generated without leaving the application or closing the database. Engineering performance measures such as track degradation rates can be compared between divisions or subdivisions.

Data is Always Current

Storing an entire railroad's data on a central server accessed over a corporate network or the Internet eliminates data distribution problems. There is no need to send out DVD's or transfer large files to remote users. And users will always have access to the latest data.

Data Security

A database on a corporate server is safeguarded by standard IT practices, including daily backups.

Centralized Software

In the three-tier configuration (described under "Architecture" above) no software is installed on end-user computers. This minimizes IT concerns and ensures that all users are running the same software.

Easy Upgrade Path

No re-learning is required when users upgrade from Track Analyst on the desktop to Enterprise. And when upgrading from a lower-level product such as Track View, only the additional features need to be learned. Credits from standalone software licenses may be applied to an Enterprise upgrade.

