



Safe Software: The Spatial ETL Experts

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www.safe.com



New in FME 2007

- **More Raster support**
- **Reprojection Libraries Selection**
- **Rich Geometry Model**
- **3D MRFCleaner**
- **CurveFitter**
- **FDO 3.2 support**
- **Pre/Post Processing with TCL/Python**
- **FMEPedia keeps getting better**

- **Raster in FME 2007**
 - We will be to raster what we are now to vector.
 - Process both raster and vector as single ETL process.
- **Performance Improvements**

- **VectorOnRasterOverlayFactory**
 - PointOnRasterOverlayer transformer
- **RasterMerger**
- **RasterSplitter**

Reprojection Interpolation

- **3 types of interpolation to choose from**
 - **Nearest Neighbor:** Fast and less accurate. Provide the closest single cell value.
 - **Bilinear:** Moderate speed and accuracy. Weights the closest 4 cells to determine the resultant value.
 - **Bicubic:** Slow and more accurate. Weights the closest 16 cells to determine the resultant value.

Reprojection Libraries

- **ESRI libraries can now be used**
- **More to come in the future**

Rich Geometry

- **Allows paths**
- **Allows arcs to be part of a polygon**
- **Measures are now part of the geometry**

- **In FME 2006 GB, MRFCleaner did not take 3D value of geometry into account**

- Smooth lines derived from line segments, points or raster data, and replace large numbers of vertices (points or line segments) with arcs
- File sizes can be reduced by up to 80%
- Based on polyline optimizer technology licensed from TCI Corporation (<http://www.tcicorp.com/>)

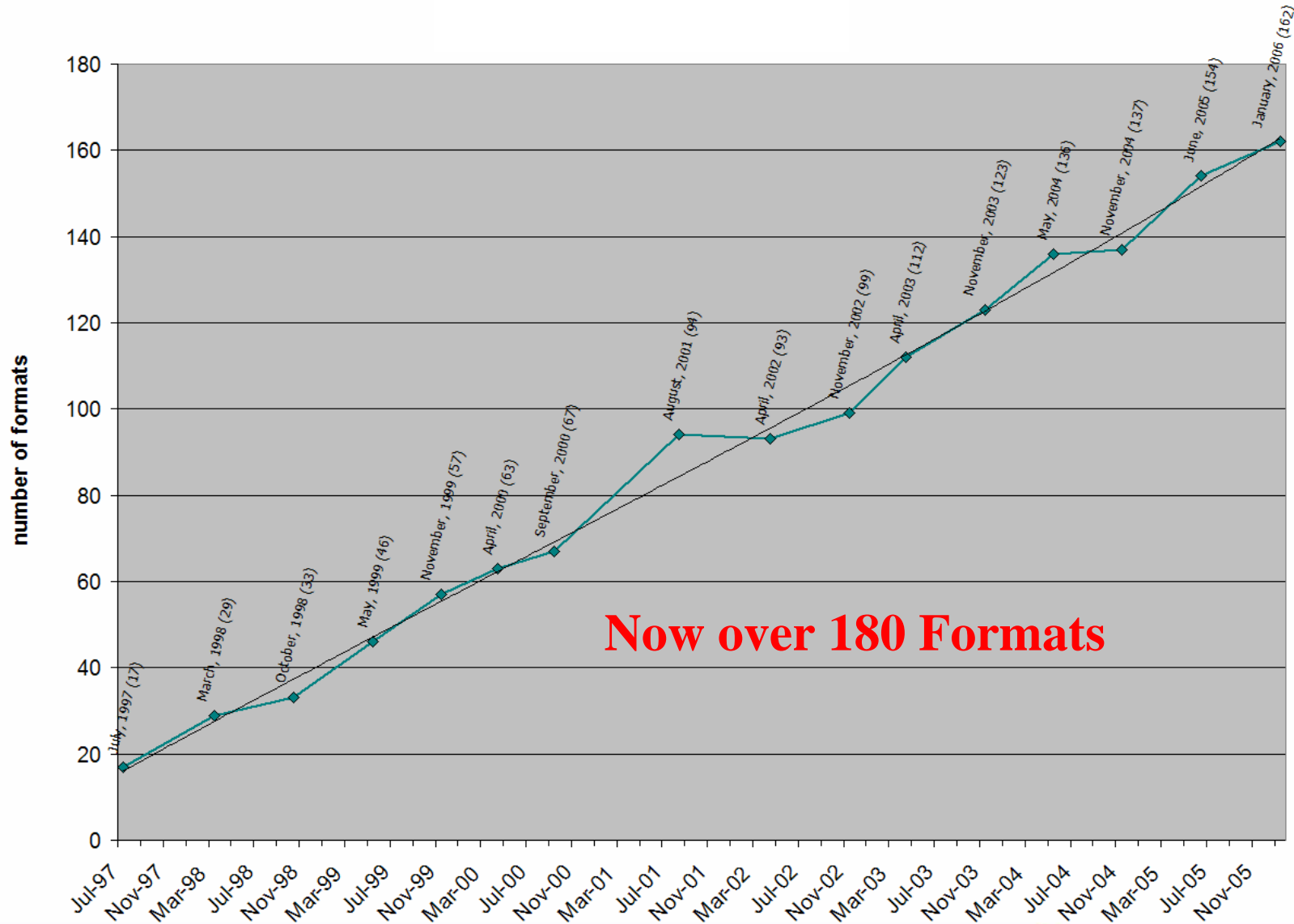
- **Supports the upcoming release of:**
 - Autodesk Map
 - MapGuide
- **Read-only for FME 2007**
 - Read/Write will be supported soon
 - ESRI Geodatabase
 - PostGIS
 - Others as we evaluate demand

- **TCL and Python are supported**
- **Some examples are:**
 - Chain together translations
 - Add additional information to translation log
 - Move, copy, email, backup or otherwise post/pre-process the destination datasets
 - output a complete set of translation statistics to a summary file at the end of translation
 - insert a record of the translation's activity into a database using the TclODBC package
 - insert a record of the translation's activity into an Oracle database using the Oratcl package

- www.fmepedia.com
- Contains entries for everything I'll discuss in this presentation, and more

- **64 bit FME Engine**
 - Enable us to take advantage of machines with lots of memory.
- **FME Spatial ETL Server development continues**
 - More technologies supported.
 - Improved integration with other products.
- **Continued Integration with other Products**
 - Both spatial and non-spatial.

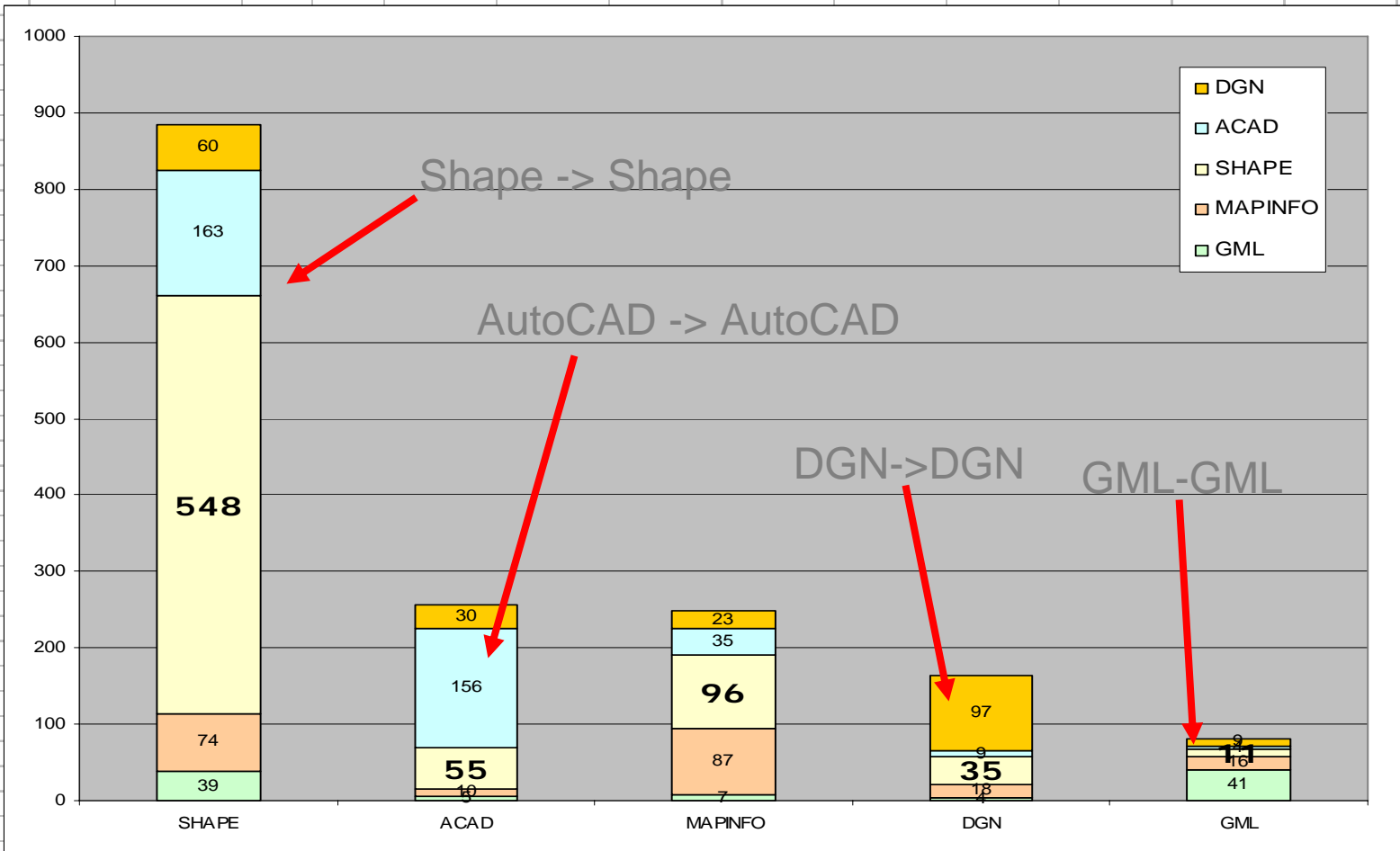
Formats = Data Access





Spatial ETL not = changing formats

Reader	SHAPE	ACAD	MAPINFO	DGN	GML
ACAD	163	156	35	9	4
DGN	60	30	23	97	9
GML	39	5	7	4	41
MAPINFO	74	10	87	18	16
SHAPE	548	55	96	35	11

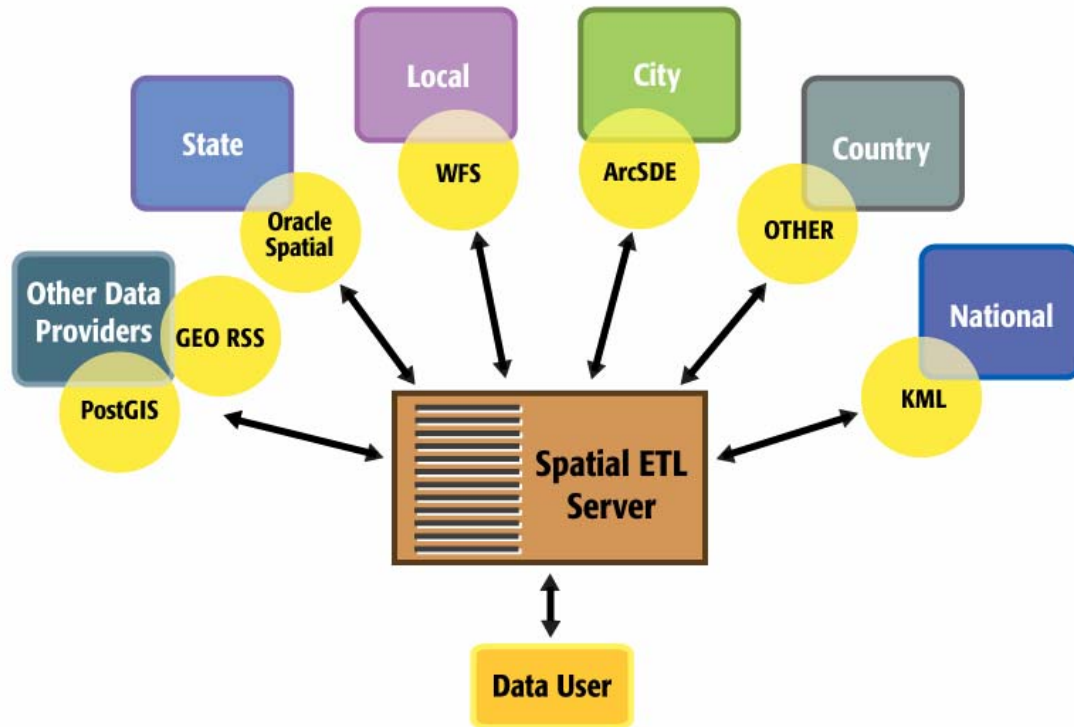


What is Spatial ETL?

- **ETL stands for**
 - Extract, Transform and Load.
 - technology that enables organizations to move data from multiple sources, reformat and/or cleanse it, and load it into other database(s), a data mart or a data warehouse for analysis, or on another operational system to support a business process.
- **Spatial ETL is an ETL tool with a spatial focus.**
- **Spatial ETL is all about:**
 - Data Access, Data Sharing, Data Mining, ...

*The power of Spatial ETL is the **Transformation capabilities.***

Federate



- *Must be able to access data where it is and share as federated(unified) dataview.*
- *Can't require data to be copied to one datastore or put into a unified schema.*

FME Spatial ETL Server

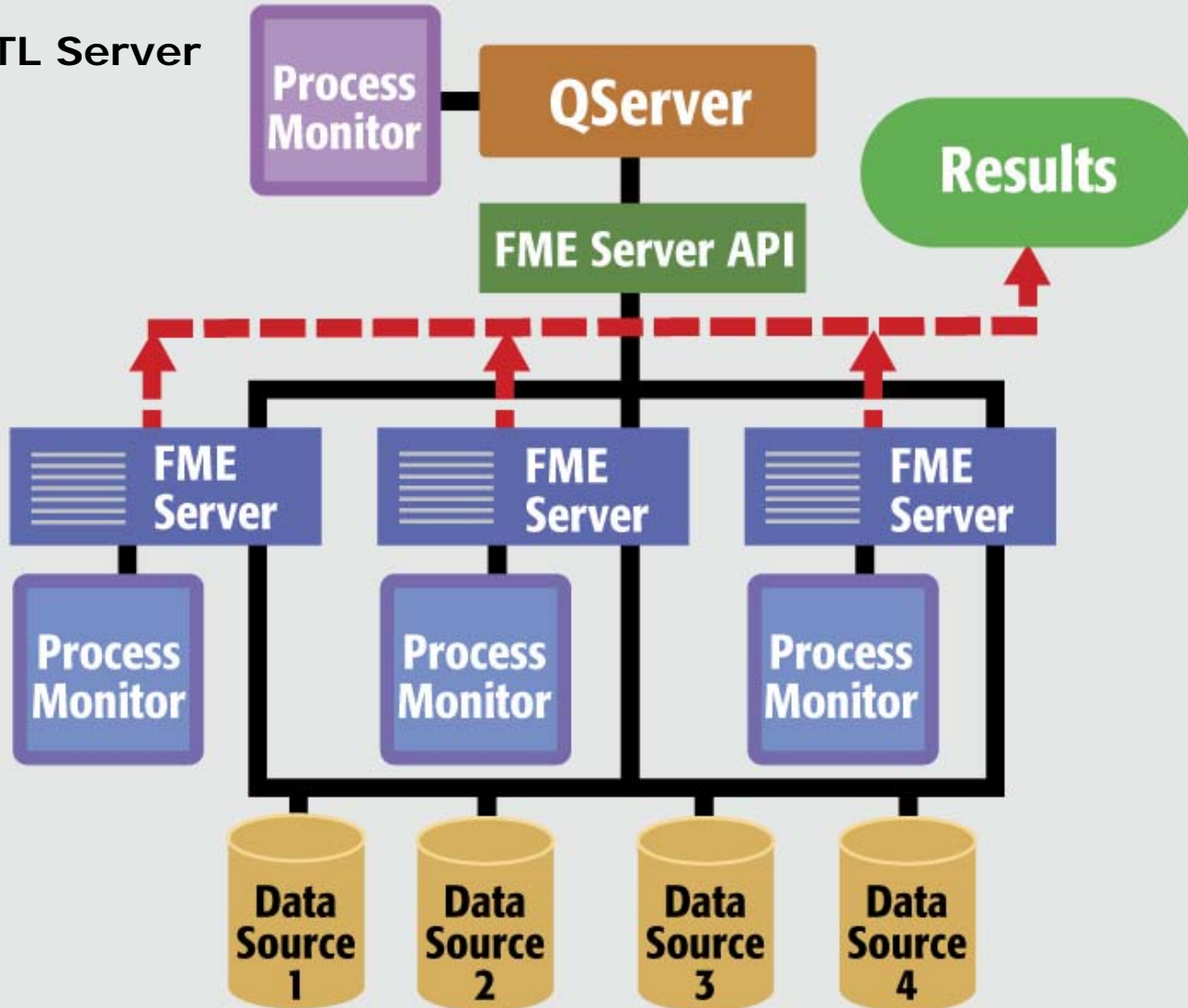
- **Brings FME capabilities to server.**
 - Can serve data in any supported format.
 - Can federate data on the fly.
 - Restructures data so user's get view they need.

- **Provides data access in a myriad of technologies.**
 - Standards-based access protocols.
 - Defacto standards access protocols.
 - Variety of API's.

*Access Protocols are the formats of the Web.
Goal of our server is to support a variety so
the user can decide which is best for them.*

Scalable Server Solution

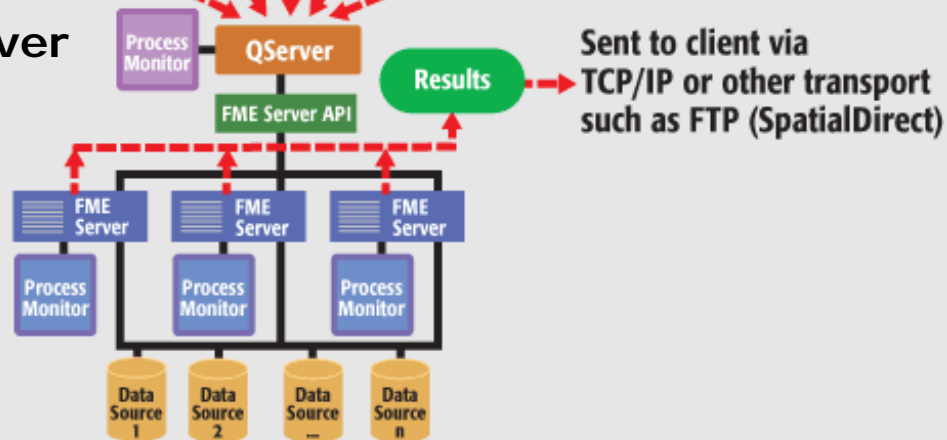
FME Spatial ETL Server



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FME Spatial ETL Server



Where to get it

- **You can download a beta from**
ftp://ftp.spatialdirect.com/outgoing/FME_Spatial_ETL
- **You'll need a 'Server' evaluation license, which you can get from**
 - Consortech
 - Safe Software

Thank You

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- Thank you for the opportunity to give an overview of our technology.
- For more information
 - see our website at www.safe.com or
 - contact me via email at ryan.cragg@safe.com