

A 3D architectural rendering of a cityscape. In the foreground, there is a large blue river or lake. To the left, a green area with small trees is visible. In the center, a large stadium with a circular field is shown. The background features a dense city skyline with various skyscrapers. The scene is illuminated with a dark sky, suggesting a night or dusk setting. The text "AutoCAD® Map 3D 2013" is overlaid on the left side of the image.

AutoCAD® Map 3D 2013

新特性和新API

杜长宇

开发顾问 Developer Consultant, ADN

杜长宇(Daniel Du)

- 多年软件开发及GIS工作经验
- Autodesk Developer Network开发顾问
- 主要支持下列产品API
 - Autodesk Infrastructure Map Server
 - Map 3D
 - Civil 3D
- 关注云计算和移动计算相关技术



日程

- AutoCAD Map 3D 2013新功能概览
- Map 和行业数据模型API的增强和变化

新特性

AutoCAD® Map 3D 2013

数据访问和编辑

更多方式访问和编辑数据

- 存储于Microsoft® SQL Server®中的行业模型
- 行业模型的离线编辑
- 动态tooltips 和超链接

地图输出Public Review

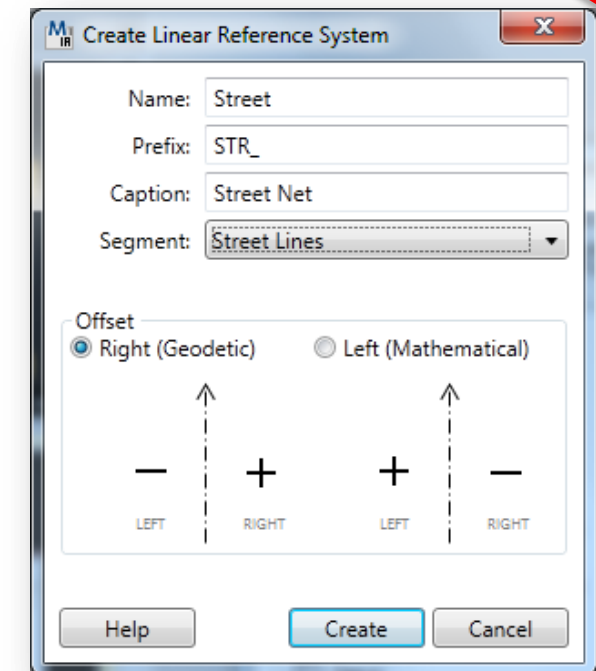
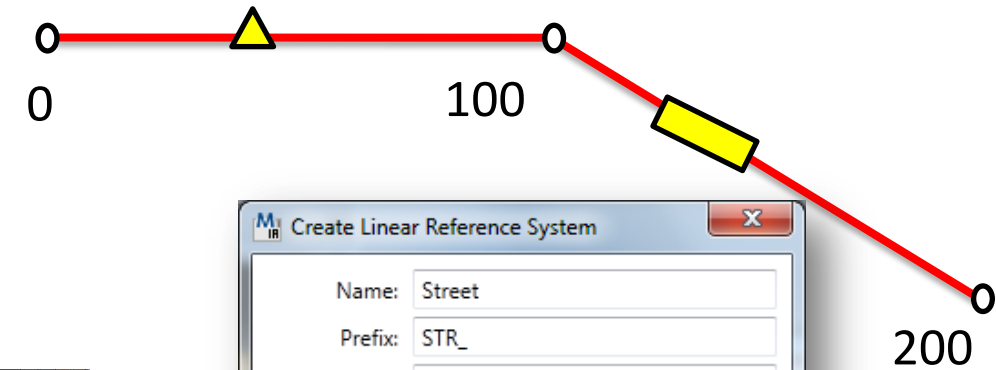
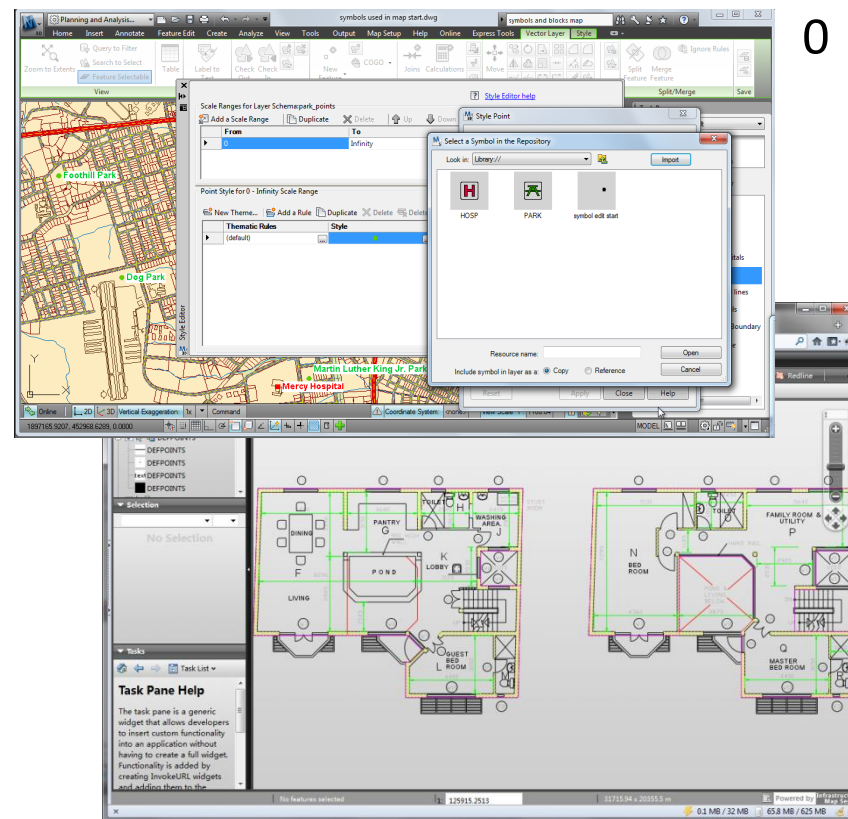
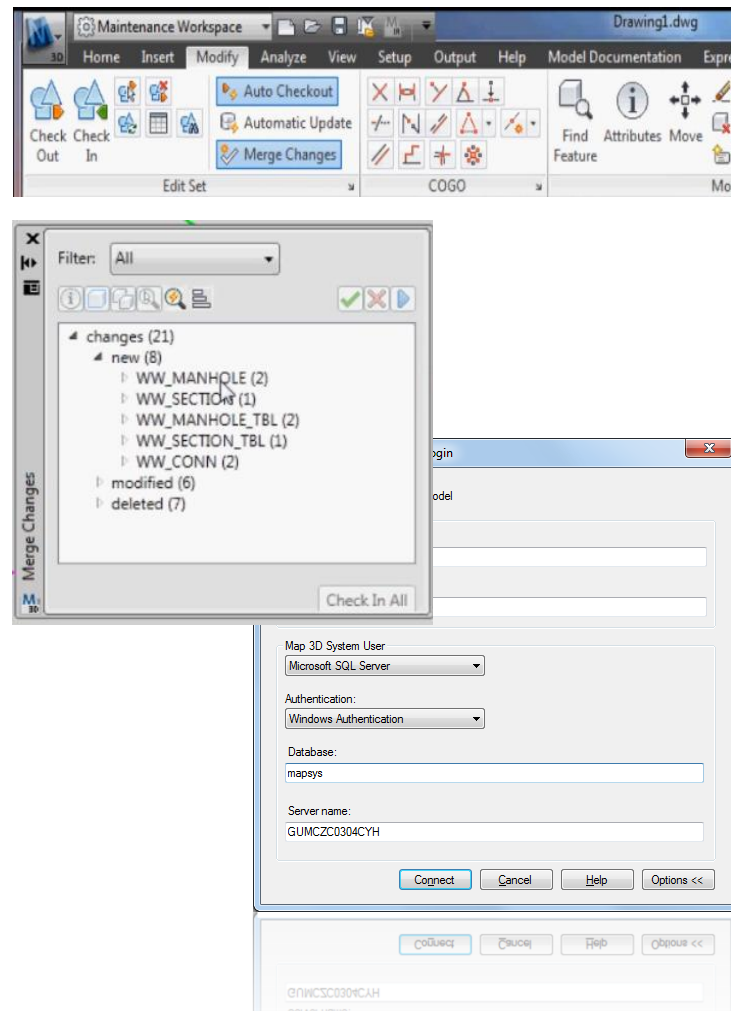
轻松发布地图和数据

- 直接发布原生DWG™ 到 Web
- 动态地图元素
- 创建和编辑地图符号

数据建模与管理

管理您的基础设施信息

- 把CAD和 GIS数据转换到行业模型
- 行业模型中的线性参考系

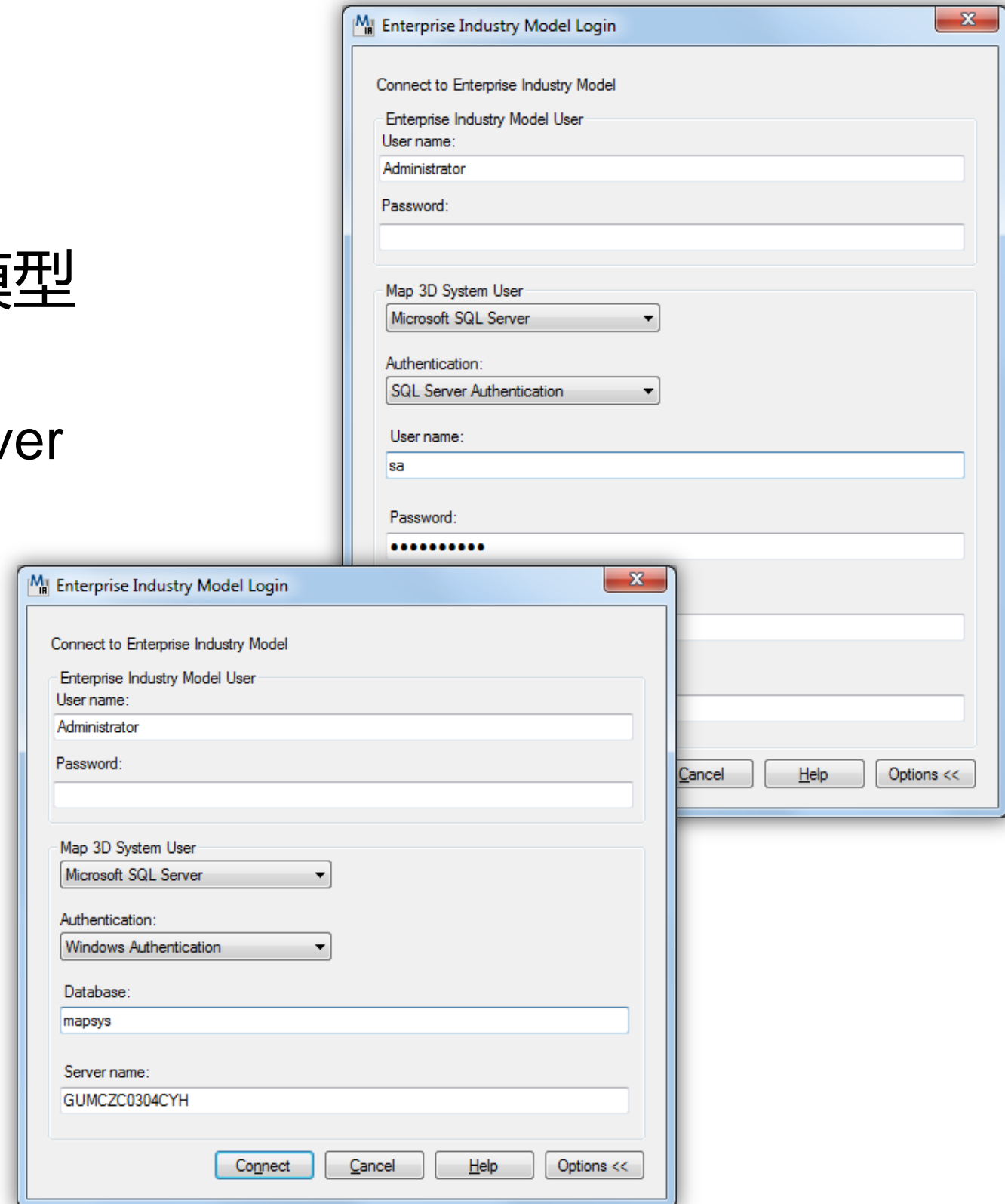


数据访问和编辑

AutoCAD Map 3D 2013

Microsoft SQL Server上的行业模型

- SQL Server 2008 R2
- 增强的FDO provider for SQL Server



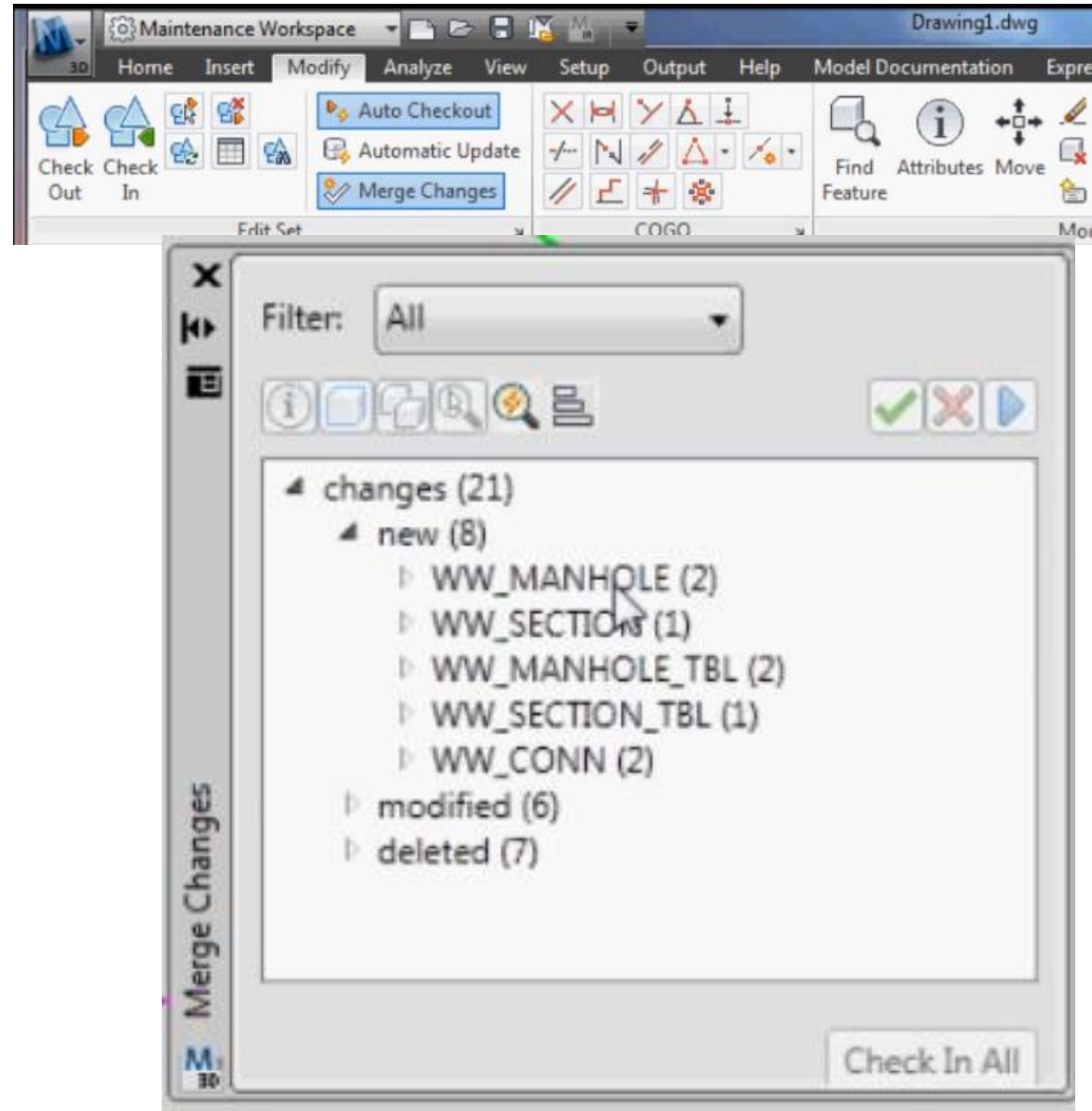
Work with Industry Models on the platform of your choice.

数据访问和编辑

AutoCAD Map 3D 2013

行业模型的离线编辑

- 控制要素检入和编辑
- 外业环境中使用企业数据



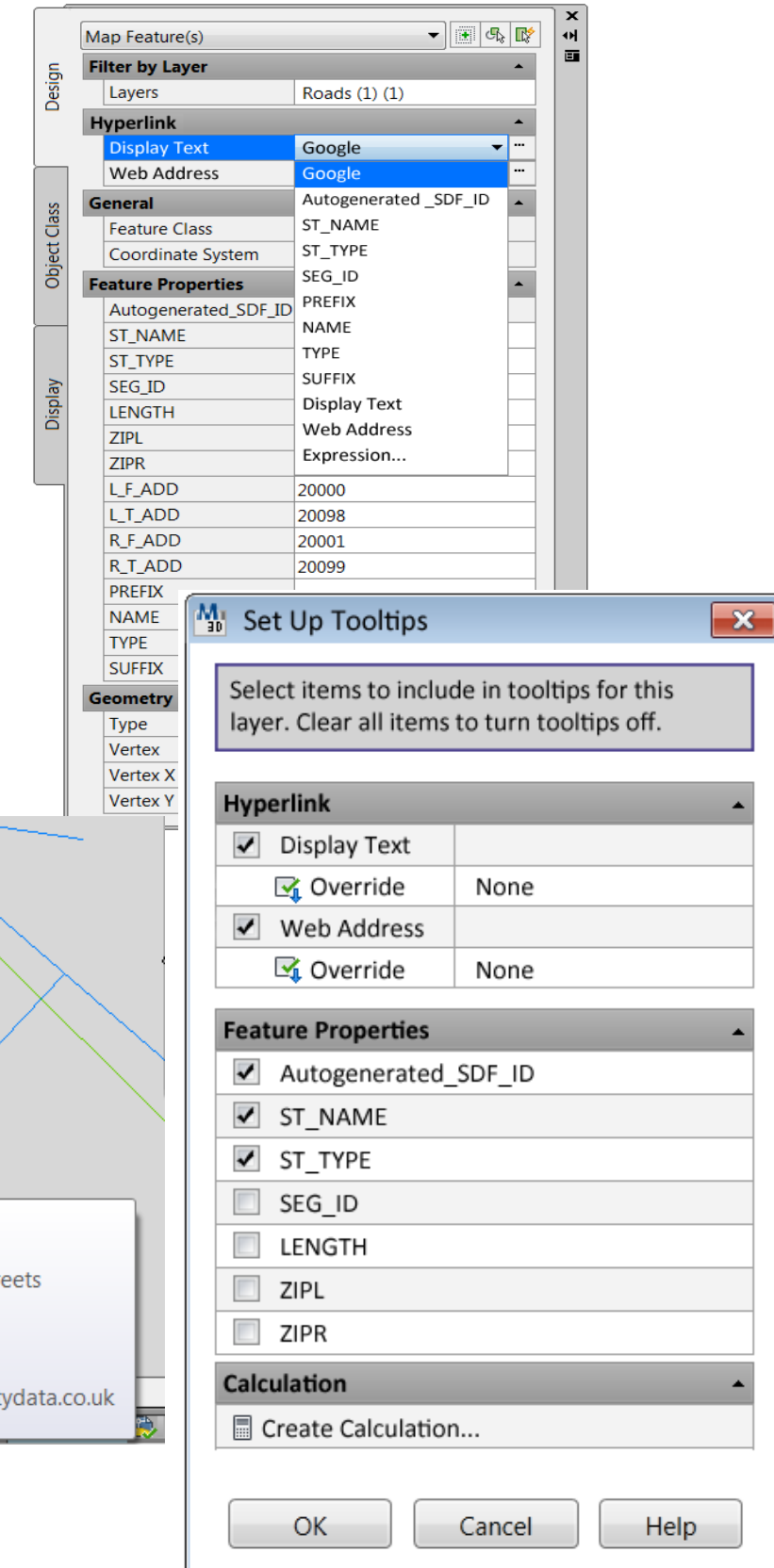
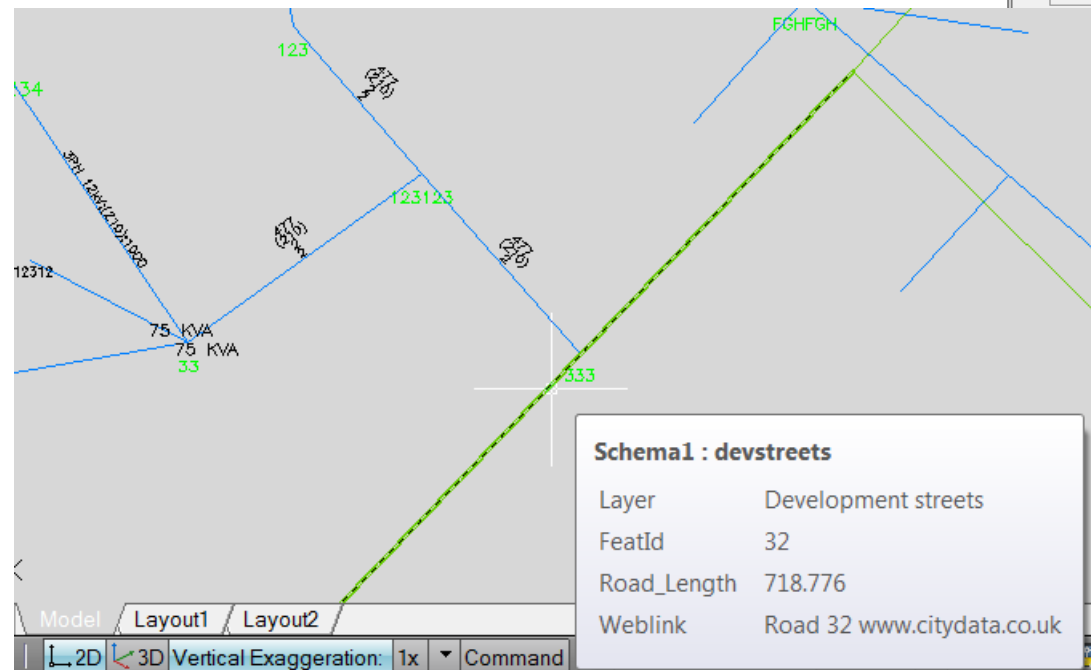
Work more efficiently with industry model data.

数据访问和编辑

AutoCAD Map 3D 2013

动态Tooltips和超链接

- 使用属性数据定义Tooltip
- FDO 和行业模型要素均可使用
- 超链接和计算字段



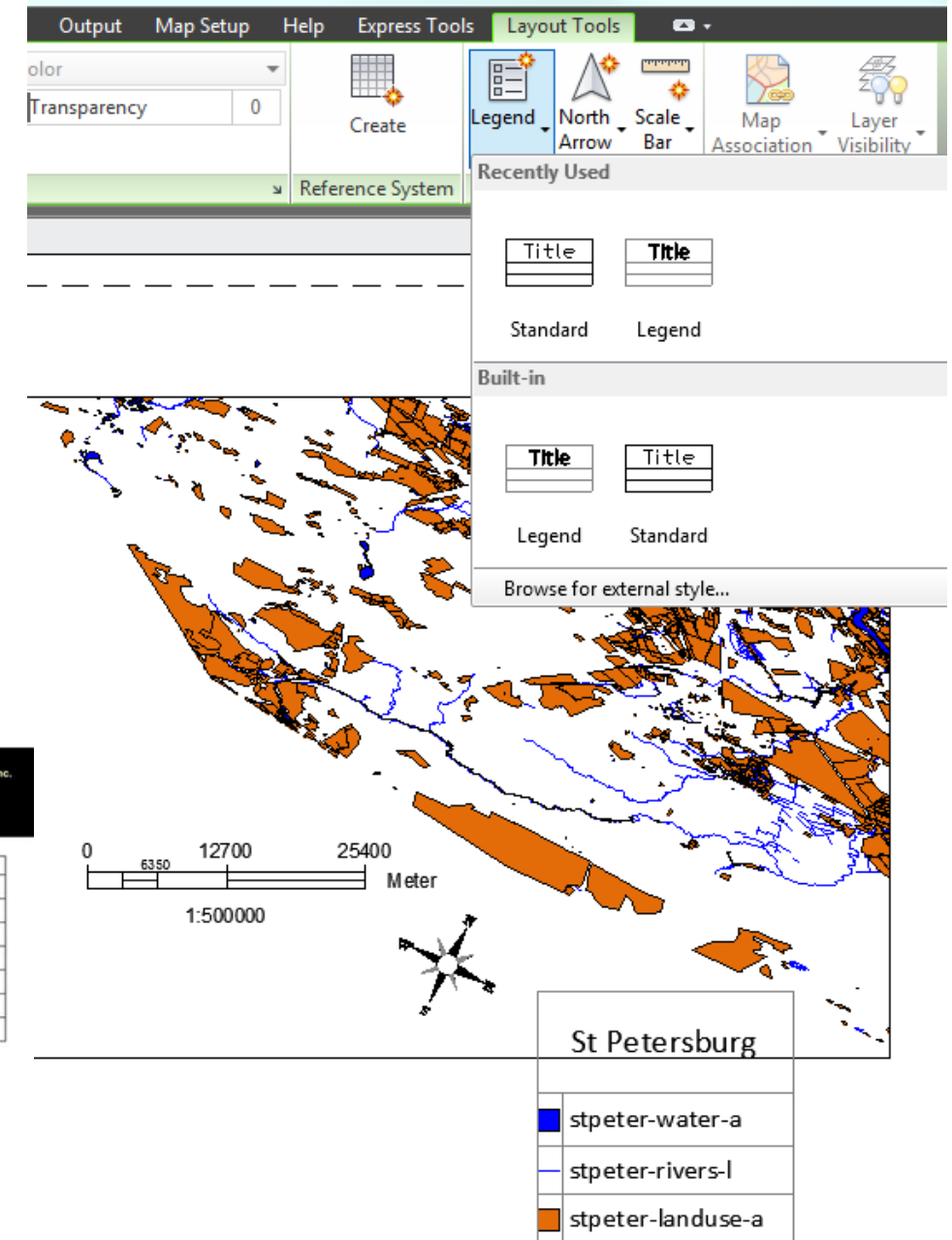
Easier access to feature attributes and external data

地图发布

AutoCAD Map 3D 2013

动态地图要素

- 多个地图和视口
- 指北针
- 比例尺
- 图例



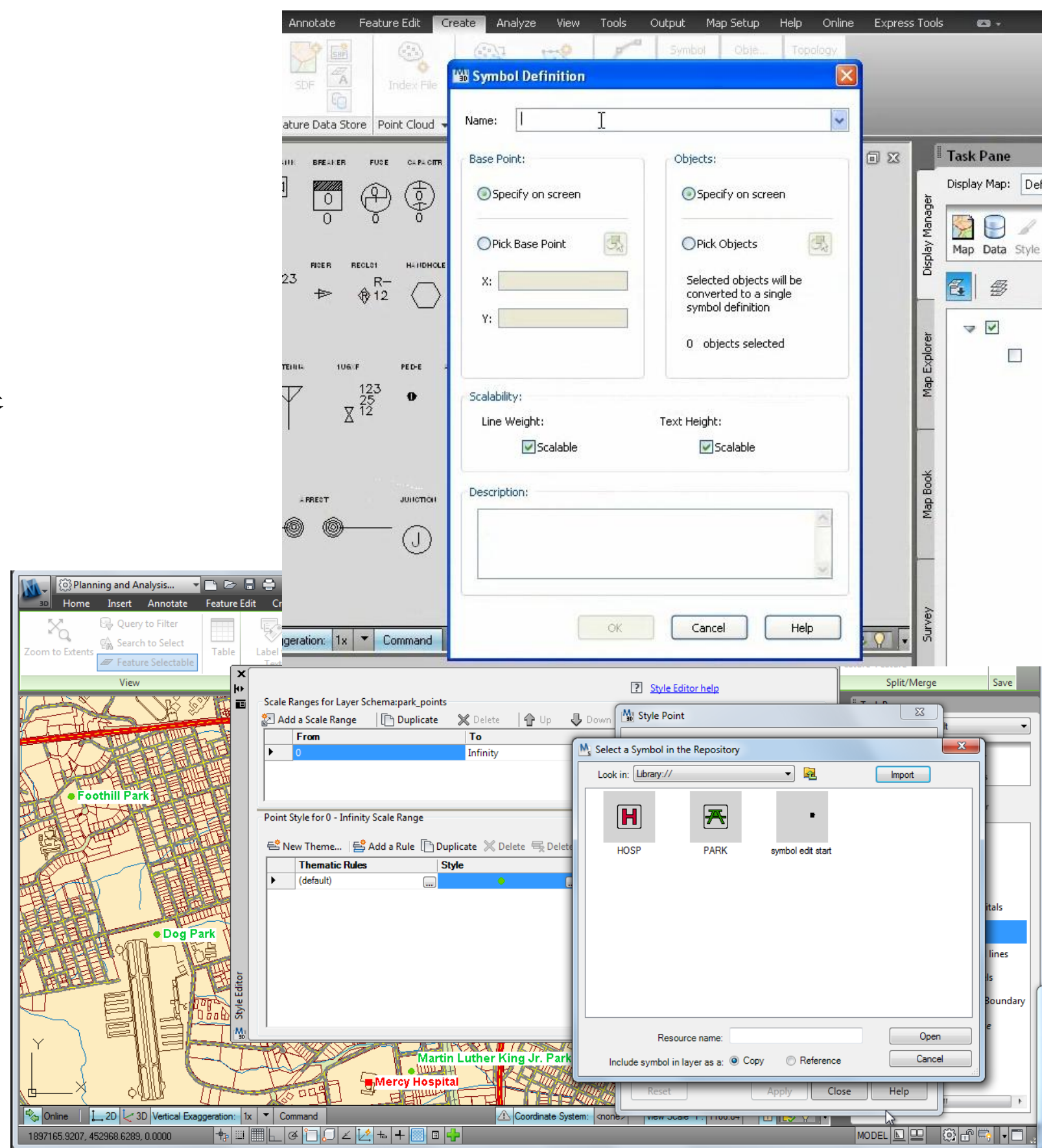
Generate higher-quality cartographic maps.

地图发布

AutoCAD Map 3D 2013

创建和编辑地图符号

- 更优化的过程
- AutoCAD® 块编辑器
- 保存和修改



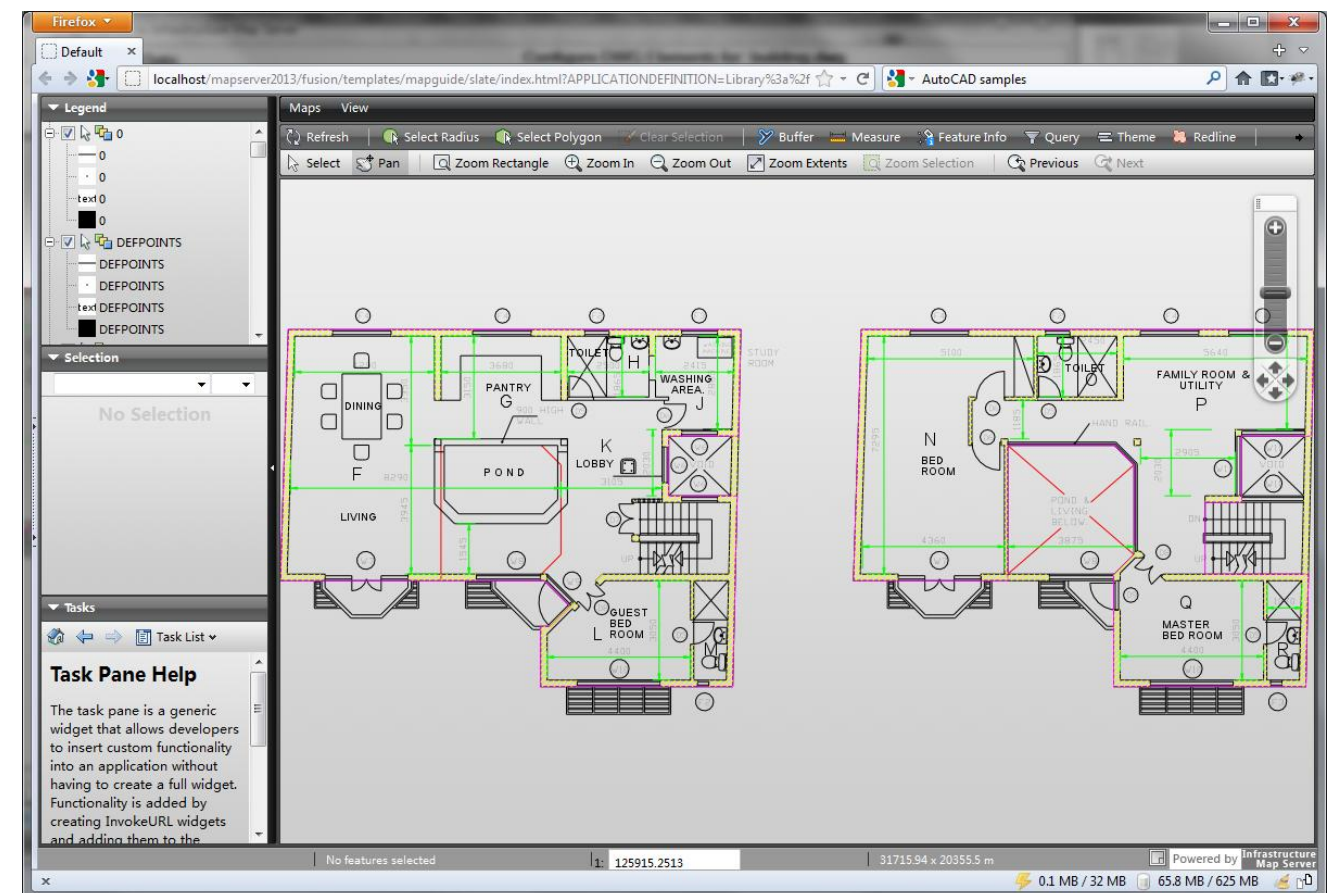
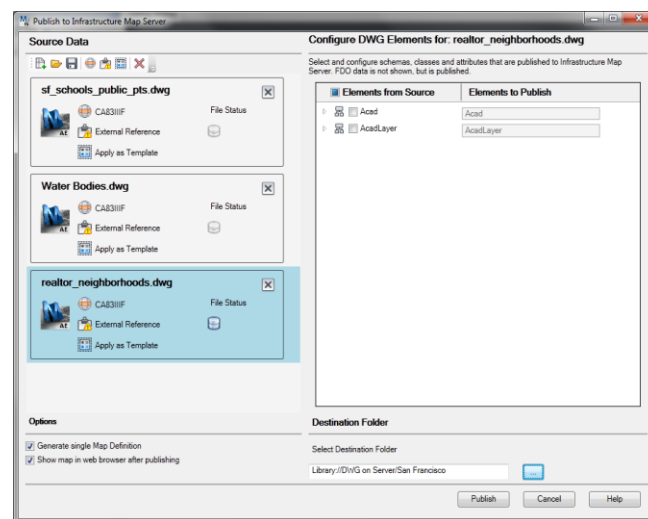
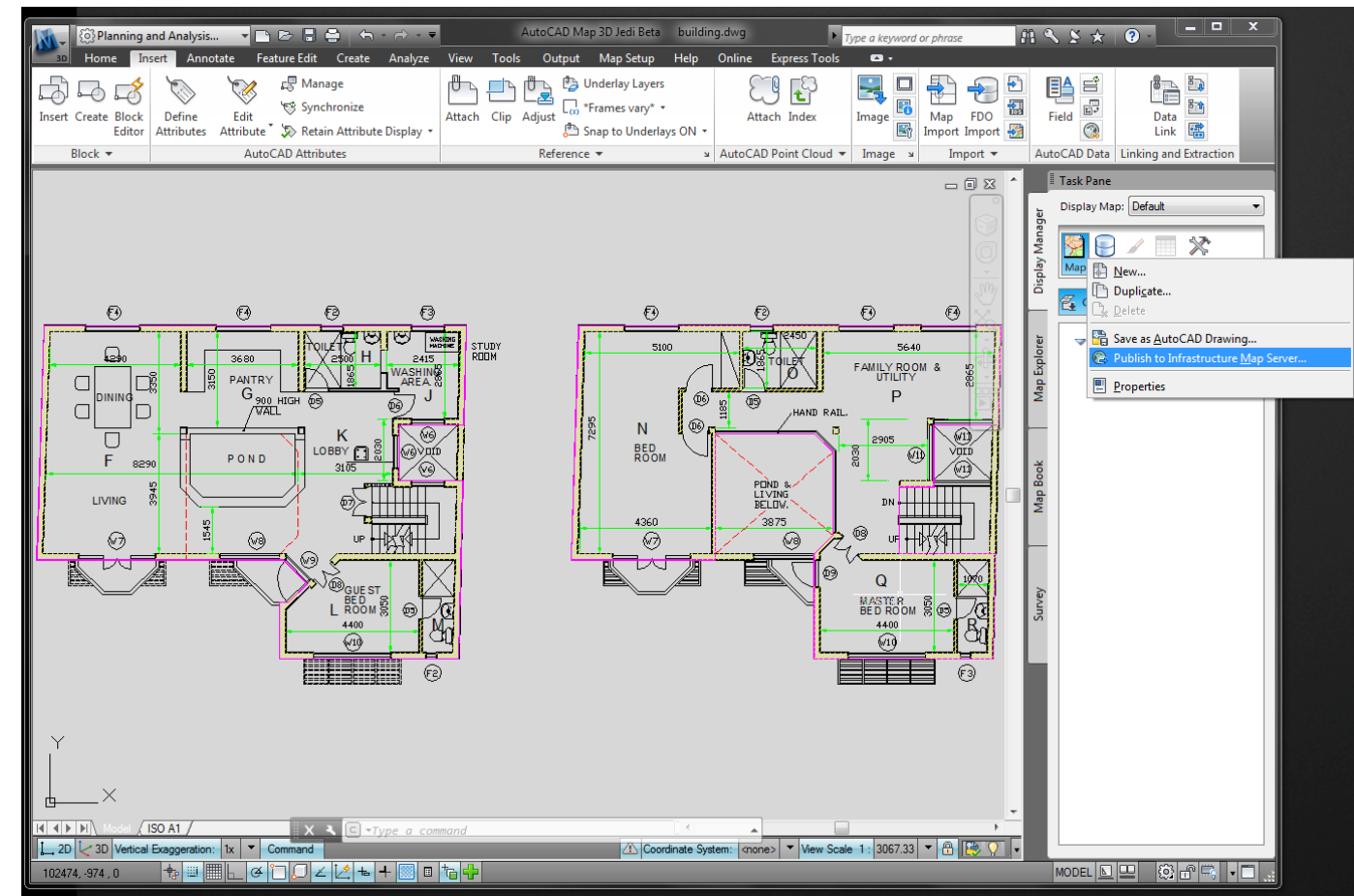
Use AutoCAD expertise to create cartographic symbols.

地图发布

AutoCAD Map 3D 2013

直接发布原生DWG 到Web

- 无需数据转换
- 保持数据和样式
- 一步发布
- Map 3D 和Autodesk® Infrastructure Studio 2013



Make better use of DWG data.

AutoCAD Map 3D 2013

- 继续更好的管理行业数据
- 充分利用**FDO**和**DWG**数据
- 转换源数据到行业模型，并且保存转换脚本



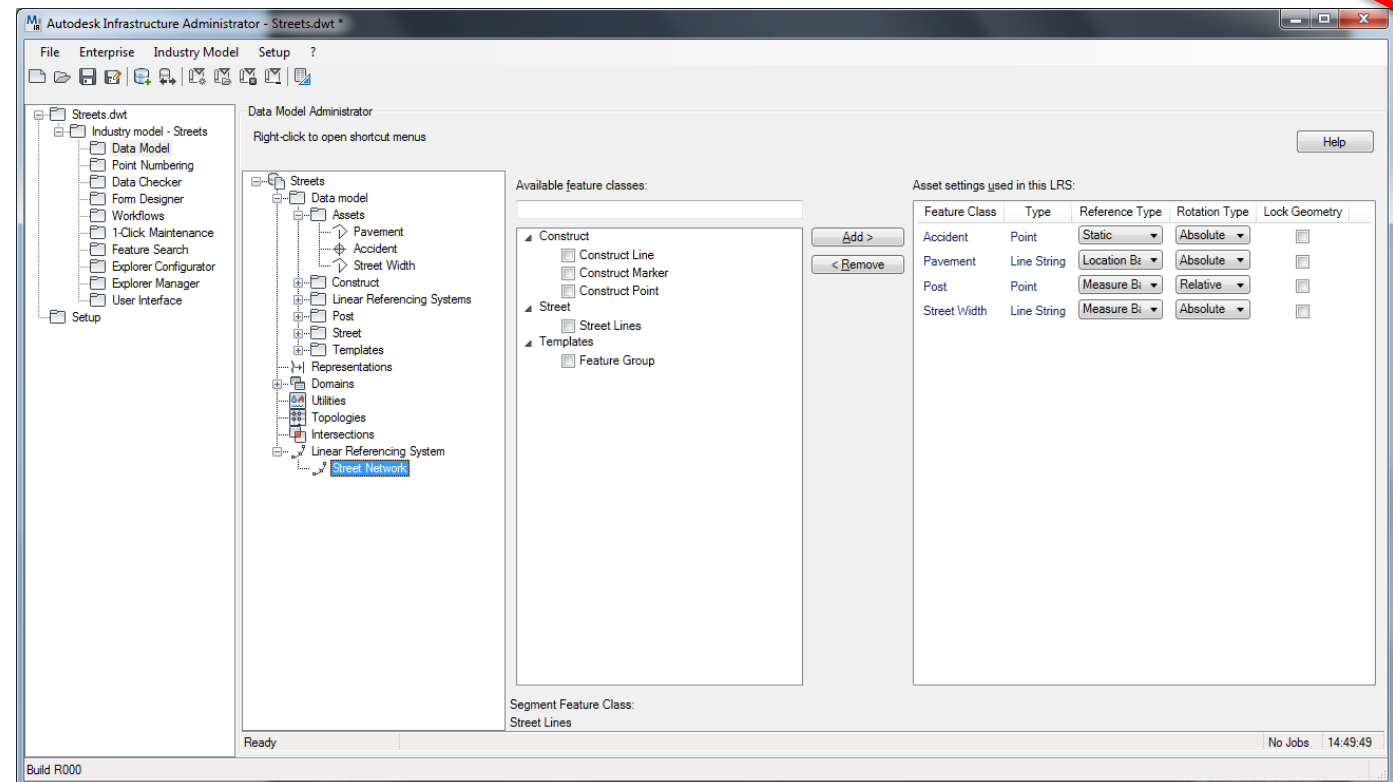
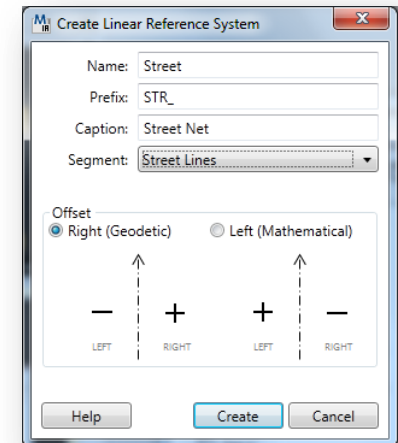
© 2012 Autodesk

数据建模和管理

AutoCAD Map 3D 2013

行业模型中的线性参考系

- 公路，铁路和市政管线设施网络
- 在Infrastructure Administrator里配置
- Oracle, SQL Server₀, DWG₀



Better manage networks by incorporating linear referencing.

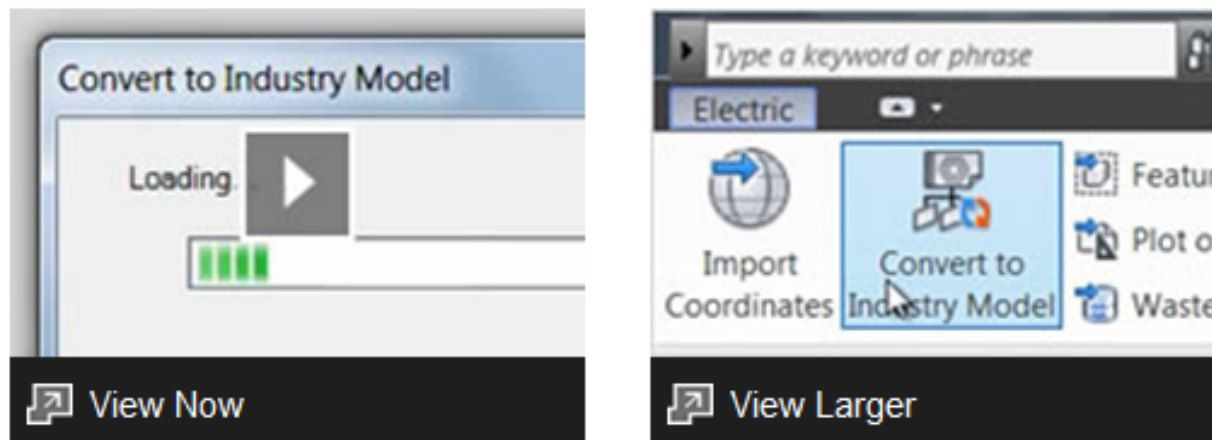
新功能视频

AutoCAD Map 3D 2013

What's New

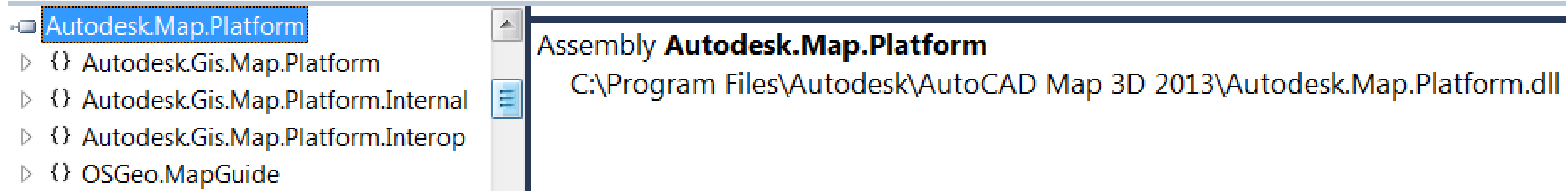
Convert GIS and CAD Data to Intelligent Industry Models

With AutoCAD® Map 3D 2013 software, GIS professionals, planners, and civil engineers can more easily create and manage intelligent industry models by converting GIS and CAD data. Users can populate a new industry model from FDO data sources or DWG™ files and map feature classes and attributes. Then, convert the data to a model and save the database as a DWG/DWT file for use in future projects.



Video (1:57)

Map Platform APIs



Autodesk.Map.Platform.Core.dll从Map 3D中删除了

请使用**Autodesk.Map.Platform.dll**

~~Autodesk.Map.Platform.Core.dll~~

Map Platform APIs

Autodesk.Gis.Map.Platform.AcMapLayer的新方法

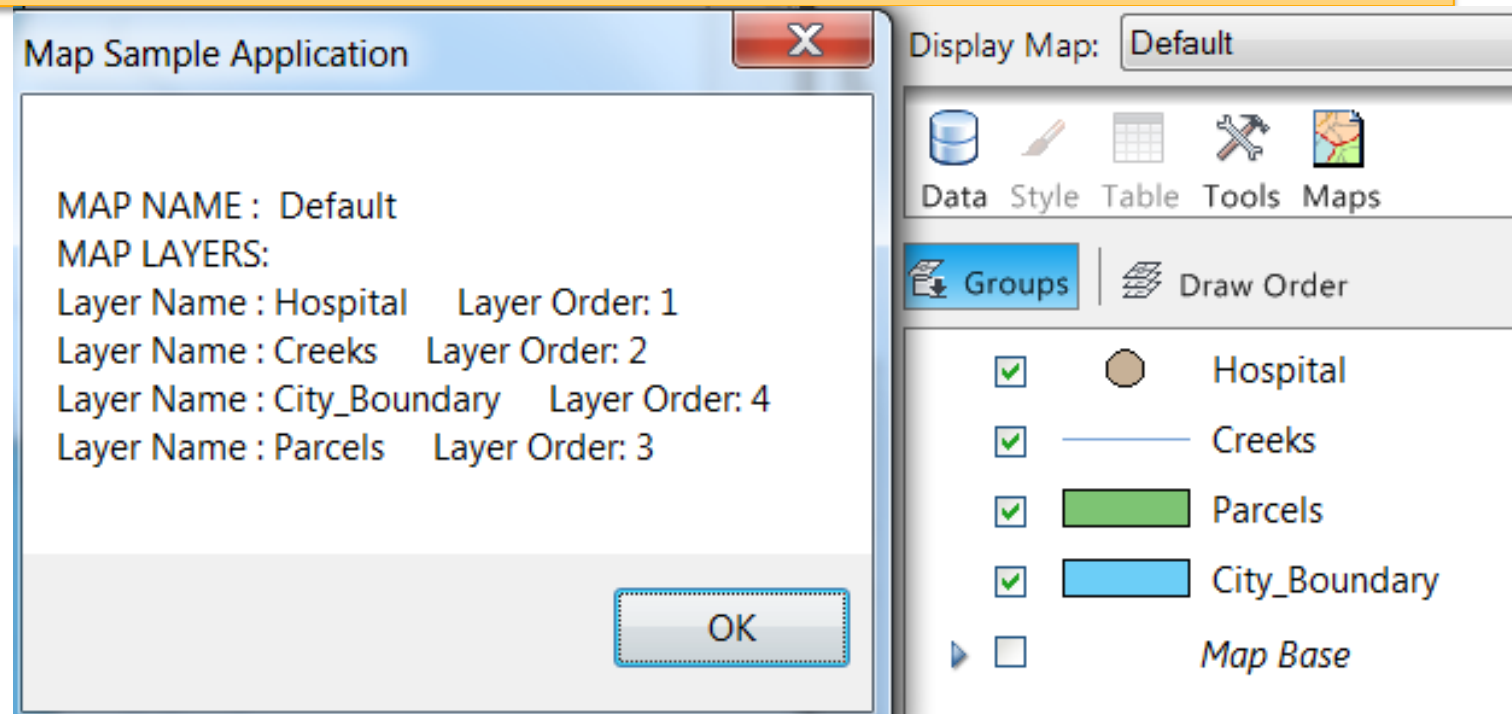
public virtual int **GetOrder()**

public virtual void **SetOrder(int value)**

<http://adndevblog.typepad.com/infrastructure/2012/07/get-and-set-acmaplayer-order-using-map-3d-platform-api.html>

Map Platform APIs

```
if (layer.Name == "City_Boundary")
{
    // Set Layer Order
    layer.SetOrder(4);
}
msg += "Layer Name : " + layer.Name + " " + "Layer
Order: " + layer.GetOrder().ToString() + "\n";
```



行业数据模型API的变化

程序集和命名空间重命名

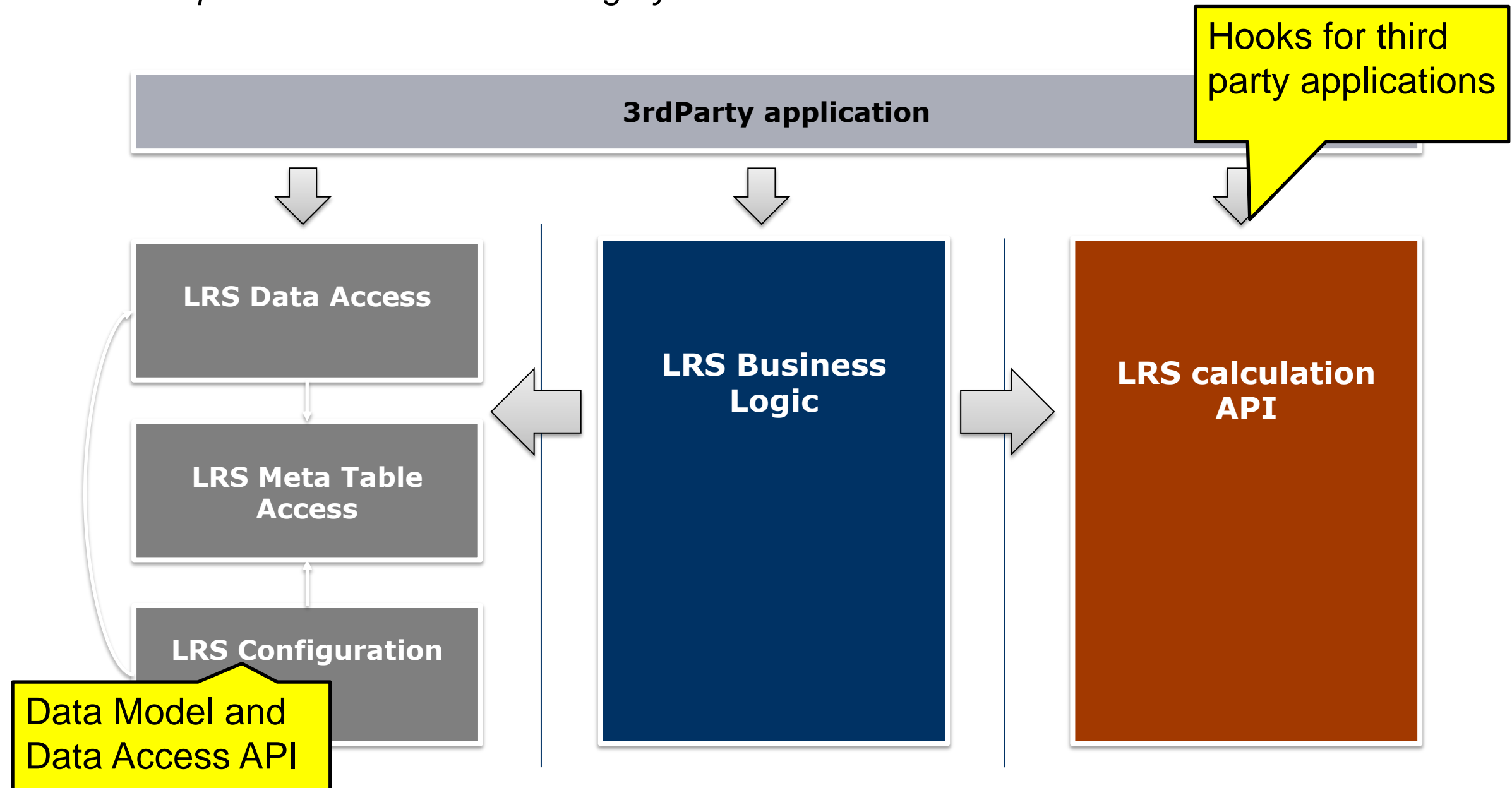
从“**Topobase.XXX**”到“**Autodesk.Map.IM.XXX**”

Name in AutoCAD Map 2012	New name in AutoCAD Map “Jedi”
Topobase.AreaTopology.dll	Autodesk.Map.IM.AreaTopology.dll
Topobase.AreaTopology.FeatureRules.dll	Autodesk.Map.IM.AreaTopology.FeatureRules.dll
Topobase.AutoCADHelp.dll	Autodesk.Map.IM.AutoCADHelp.dll
Topobase.BaseFeatureRules.dll	Autodesk.Map.IM.BaseFeatureRules.dll
Topobase.Batch.dll	Autodesk.Map.IM.Batch.dll

线性参考系API

LRS engine 在Autodesk.Map.IM.LRS命名空间内

See C# Sample 143 «Linear Referencing System» for a demo on how to use the LRS API



API 参考文档

Samples and Documentation:

The Docs subfolder in the AutoCAD Map ObjectARX SDK (download links below) installation directory contains Help files and Developers Guide for all the APIs, except the ActiveX (COM Automation) and AutoLISP® APIs.

Documentation for the ActiveX (COM Automation) and AutoLISP® APIs are in the Help subfolder of the AutoCAD Map.

[AutoCAD Map 3D Help](#) is available online. AutoCAD Map 3D Developer Guides and other useful resources available from the [Documentation](#) link page.

Developer Documentation



[AutoCAD Map 3D 2013 Developer Guides](#)



[AutoCAD Map 3D 2013 API References \(zip - 375231Kb\)](#)



[AutoCAD Map 3D 2012 API References \(zip - 239213Kb\)](#)

Please note that in the API References, the product names have not yet been updated to AutoCAD Map 3D 2012.



[AutoCAD Map 3D 2011 and Autodesk Topobase Developer Documentation \(zip - 9693Kb\)](#)

Infrastructure Modeling DevBlog

<http://adndevblog.typepad.com/infrastructure/>



IM DEVBLOGGERS

Augusto Goncalves

Daniel Du

Gopinath Taget

Marat Mirgaleev

Partha Sarkar

MAY 2012

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		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUTODESK BLOGS

ADN DevBlog - AutoCAD

Our DevBlog for AutoCAD and other platform technology APIs.

[« DBEnvironmentProperties in 'serverconfig.ini' of AIMS 2013 | Main | Want to know which Object Data Tables are in the current drawing file? »](#)

05/04/2012

Using Surface.GetBoundedVolumes() in AutoCAD Civil 3D 2013 .NET API

By [Partha Sarkar](#)

Surface.GetBoundedVolumes() is a new inclusion in 2013 release of AutoCAD Civil 3D .NET API, which calculates the volume of a closed area.

GetBoundedVolumes(Point3dCollection polygon) takes a *Point3dCollection* containing points that define the vertices of a closed area and an optional elevation datum (If you do not provide an elevation datum, the method uses 0.0). One point to be noted here, the first and last point in the vertices collection must be the same, i.e. the polygon must be closed. **GetBoundedVolumes()** method returns a **SurfaceVolumeInfo** object that includes values for net volume, cut volume, and fill volume.

Here is a C# code snippet which demonstrates usage of this API function in AutoCAD Civil 3D 2013 :

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[How to modify / update Feature attribute using API in Map 3D?](#)

[How to create FDO Feature using Geospatial Platform API in Map 3D?](#)

[Want to know which Object Data Tables are in the current drawing file?](#)

[Using](#)

Blogs

- <http://www.cnblogs.com/junqilian/>



The screenshot shows a web browser window with multiple tabs. The active tab is '峻祁连 - 博客园'. The address bar shows 'www.cnblogs.com/junqilian/'. The page header features a blue sky background with the text 'www.cnblogs.com' and '峻祁连. Look at The Earth'. Below this, it says 'MapGuide OpenSource/Enterprise, AutoCAD Map 3D, Civil 3D, and more...'. On the left side, there is a 'Select Language' dropdown menu, 'Powered by Google Translate', and logos for 'MapGuide 开发者网络 Developer Network' and 'NewMGDN.com'. A profile picture of a man with glasses is shown, with the name '杜长宇(Daniel Du)' below it. To the right of the profile picture, it says '他的LinkedIn, 欢迎连接!' and '免责声明'. Below the disclaimer, there is a paragraph of text. On the right side of the page, there is a navigation bar with links: '博客园', '首页', '博问', '闪存', '新随笔', '联系', '订阅XML', and '管理'. Below this, it says '随笔-261 评论-24'. The main content area shows two blog posts. The first post is dated '2012年7月20日' and is titled 'MapGuide/Autodesk Infrastructure Map Server(AIMS)的开发实例下载'. The summary of the post is: '摘要: 大家经常说找不到MapGuide开发的相关例子, 这里再广告一下, 大家可以从这里下载MapGuide开发的相关实例程序, 这些例子包括: MapGuide OpenSource. mgp -- 示例程序所使用的地图数据, 使用mapadmin里面的package management工具来加载, 不清楚的请看 - viewer API的使用Solution3 -- 认证及资源服务的使用Solution4 -- Create Map as DWF 输出地图为DWF Create Map as Plain Image Create Points 创建点 C 阅读全文'. The post is dated 'posted @ 2012-07-20 17:25 峻祁连 阅读'. The second post is dated '2012年7月19日' and is titled '如何利用AIMS2013/MapGuide搭建WMS服务'. The summary of the post is: '摘要: 估计会有不少人想利用AIMS 2013来提供WMS服务, 碰巧产品支持的同事在BingCivil上发表的一篇blog讲到了这个问题, 给大家...'.

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AutoCAD

[Through the Interface](#) – Kean Walmsley

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Thank You !

Daniel.Du@autodesk.com

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