ESRI (UK) EVENTS

Q&A Session

Event Name: Enterprise Route Optimisation in Local Government
Date and time: 22/04/2009 10.00 – 11.00

Event Name:	Enterprise Route Optimisation in Local Government
Date and time:	22/04/2009 10.00 – 11.00

ArcLogistics Desktop

1. What street data is included with ArcLogistics?

ArcLogistics requires street level network data to build optimised routes between the orders and provide driving directions.

In addition to the street level network dataset which can be supplied with ArcLogistics (NAVTEQ or Tele Atlas), ArcLogistics supports Network Datasets created by ArcGIS Network Analyst 9.3 – we would be happy to discuss your needs regarding street level network data.

2. Can we use OS MasterMap ITN layer data with ArcLogistics?

ArcLogistics supports Network Datasets created by ArcGIS Network Analyst 9.3 – if you have built a transport network using your ITN data and Network Analyst then you should be able to use this with ArcLogistics.

A transport network using ITN data can be built using Productivity Suite and the Network Analyst extension to ArcGIS.

3. Can we modify the schedule once it has been optimised by ArcLogistics?

Yes, absolutely. As we have shown in this webinar, schedules are created and managed inside folders – much like the way Windows Explorer organises your documents.

Following ArcLogistics optimising the schedule, you are able to move work around your fleet... assign new work etc. Basically, the Planner is able to 'tweak' the schedule until they are happy with the result. This enables the Planner to create 'scenarios' and compare the results such as the cost between the various scenarios. Once they are happy with the schedule they can then send the schedule to the drivers using reports or ArcLogistics Navigator.

4. Why would I need to modify the schedule after ArcLogistics has already optimised it?

ArcLogistics will provide most of the answer to your scheduling problem; however it is unlikely to be the 'silver bullet'. To the Planner, ArcLogistics would be the equivalent to a calculator used by an Accountant!

Event Name: Enterprise Route Optimisation in Local Government
Date and time: 22/04/2009 10.00 – 11.00

5. What are vehicle and driver specialties?

ArcLogistics allows resources to be defined as to what they can do. This therefore ensures that the order is not assigned to the wrong vehicle.

We have used specialities during this webinar to allocate children pick-up's requiring a wheelchair lift to vehicles which have a wheelchair lift fitted. A vehicle can have multiple specialities.

Specialties are configurable to meet the needs you have.

6. Can I import orders from my existing system or will I need to manually enter orders into ArcLogistics?

ArcLogistics can import customer order items directly from an existing external database using Open Database Connectivity (ODBC). A wizard is provided to guide you through importing orders from an existing database.

You can also enter the order information directly into ArcLogistics, if you don't already have an external database containing this information.

7. You demonstrated the Barrier tool - is this only added manually or can it be imported from third party sources?

Barriers allow you to prevent routes from travelling on specific streets. This can be temporary (i.e. for construction) or permanent (i.e. for a closed street). You add barriers to the project and they can be turned on or off for individual routing folders.

In addition to entering the locations of barriers in ArcLogistics, you can import barriers. You would want to do this if somebody else is already maintaining, for example, a list of accident locations. Barriers can be imported from a Shapefile or ArcGIS Geodatabase.

8. The Geocoding tool - very good, what database does it work with?

ArcLogistics optimises the route driven between orders/deliveries, so it needs to know the position of the delivery so that it can calculate the route to take along the road network. Geocoding is an important operation as it identifies the position of the delivery/location on the road network which enables ArcLogistics to perform the optimisation.

The Geocoding facilities provided with ArcLogistics use ArcGIS Locators. The pre-prepared datasets available with ArcLogistics (NAVTEQ or Tele Atlas) are supplied with street level ArcGIS Locators – enabling you to perform the Geocode operation immediately.

Event Name:	Enterprise Route Optimisation in Local Government
Date and time:	22/04/2009 10.00 – 11.00

9. Can I customise the reports available in ArcLogistics?

Yes, a number of reports are provided with the product including management reports, driver manifests – supplying the driver with a map, detailed driving directions and details of the order; etc.

ArcLogistics uses Crystal Reports technology to create the reports. It is possible to customise these reports further and create new reports using Crystal Reports Designer.

10. Can you monitor the location of the vehicles as they move around the route?

Monitoring the location of vehicles as they move around requires a tracking solution – we would be happy to discuss your requirements further in this area.

ArcLogistics Desktop – Price and Licensing

11. We already have Network Analyst – why do I need ArcLogistics?

Unlike Network Analyst, there is no need to have any GIS knowledge or GIS skills to use ArcLogistics.

ArcLogistics is a complete desktop solution for creating optimised routes and solving scheduling problems – ideal for anyone who has to manage a fleet such as a Planner or Dispatcher. With ArcLogistics you can create dynamic routes and schedules that cut fuel costs and improve customer service.

12. How much does it cost?

The cost of ArcLogistics Desktop depends on your requirements, such as which dataset you will be using; the size of your fleet; training required etc. Following this webinar, I would be happy to arrange a meeting with you to discuss your individual requirements and pricing in more detail – please let me know if you are interested.

13. Is ArcLogistics license concurrent so we can have several users doing different jobs in different departments?

Concurrent licences are available for ArcLogistics Desktop.

Event Name: Enterprise Route Optimisation in Local Government
Date and time: 22/04/2009 10.00 – 11.00

14. Do we get a Network Analyst license too with ArcLogistics?

ArcLogistics is designed to work as a stand-alone application for use by those managing fleets – improving efficiency by optimising routes and schedules. Unlike Network Analyst, no prior GIS skills are required to use ArcLogistics.

Whilst a Network Analyst licence is not provided as part of ArcLogistics Desktop we would be happy to discuss your individual requirements and identify whether a Network Analyst licence is required.

ArcLogistics Navigator

15. What is ArcLogistics Navigator?

ArcLogistics Navigator is an in-vehicle navigation solution that helps keep mobile workforce and fleet drivers on the optimised schedules and routes created with ArcLogistics desktop. ArcLogistics Navigator is designed to work on a mobile device (Windows Mobile v5 & v6) or Windows XP/Vista. In additional to features you would expect from a good SatNav including voice driving directions, map, estimated time of arrival etc. ArcLogistics Navigator is integrated with ArcLogistics Desktop – enabling the driver to view the work allocated to them and be navigated to each item of work.

16. How is data transferred to ArcLogistics Navigator?

There are several options available to transfer the schedule and routes from ArcLogistics Desktop to ArcLogistics Navigator – including ActiveSync; email and a shared file location.

The most suitable option for you will depend on your requirements – we would be happy to discuss your individual requirements with you to identify the most appropriate option for transferring the data.

17. If you use ITN data does this also work on the portable ArcLogistics Navigator?

Yes, the transportation network built using Network Analyst 9.3 can be converted for use by ArcLogistics Navigator using ArcGIS Desktop. In addition to the road network, an ArcGIS Locator will also be required on the mobile device to enable navigation using address information.

18. Does ArcLogistics Navigator update route if driver gets lost?

Yes, ArcLogistics Navigator will automatically re-route to optimised routes if vehicles go off course.

Event Name:	Enterprise Route Optimisation in Local Government
Date and time:	22/04/2009 10.00 – 11.00

ArcLogistics Desktop and RouteSmart

19. Does RouteSmart give us an ArcLogistics license too so we can use it for many things?

No, RouteSmart is a separate application from ArcLogistics, sold through an ESRI UK Business Partner, which exploits ArcGIS technology to provide high-density routing for tasks such as identifying gritting routes.

20. Does that mean that ArcLogistics is more flexible than RouteSmart, can we do bin routing with ArcLogistics?

ArcLogistics is a flexible application, providing efficiency savings through optimising the use of vehicles to satisfy orders.

Domestic bin routing is an example of high-density routing – where there hundreds of stops to be made by a single vehicle. RouteSmart is an application designed specifically for the purpose of solving high-density routing problems.

21. Where do the differences in functionality and benefit lie between RouteSmart and ArcLogistics?

ArcLogistics is a complete desktop solution for creating optimised routes and solving scheduling problems, taking into consideration time windows; vehicle capabilities and other constraints.

RouteSmart is designed for high-density routing such as domestic waste collection and gritting routes.

The choice of application required will depend on the problem you are solving - whether high-density (RouteSmart) or schedule optimisation (ArcLogistics).

Event Name: Enterprise Route Optimisation in Local Government
Date and time: 22/04/2009 10.00 – 11.00

Miscellaneous

22. There are lots of tools; would it not be better to consolidate these into one application (perhaps based on different licenses - a bit like ArcView - ArcEditor - ArcInfo)? Is there a list describing applications that can be supported by each product / overlap?

We are in the process of updating our web site to include this information. The products we discussed during the webinar are specific to solving problems using street network data. The table below provides a summary of each product and its purpose within this area:

Product	Purpose
ArcLogistics Desktop	ArcLogistics is a complete desktop solution for creating optimised routes and solving scheduling problems taking into consideration time windows; vehicle constraints etc. Ideal for Commercial waste, Meals on wheels, Grounds maintenance, School pick-up etc.
ArcLogistics Navigator	ArcLogistics Navigator is an in-vehicle navigation solution that helps keep mobile workforce and fleet drivers on the optimised schedules and routes created with ArcLogistics desktop
Network Analyst	Network analysis tools for the GIS Specialist to perform analysis such as identifying service area coverage; closest facilities; produce Origin-Destination matrix etc.
RouteSmart	Solving high-density routing problems, such as residential rubbish collection and gritting routes.