# Automating Safe Dig Packs, 2015
## NDL and Amey UK

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|---|---|
| **Process** | The production of information packs on existing utilities to ensure safe digging |
| **Users** | Office staff |
| **Hardware** | N/A |
| **Technology** | Application integration middleware |
| **Software** | NDL's awi$^{sx}$ integration toolkit |
| **Location** | National |
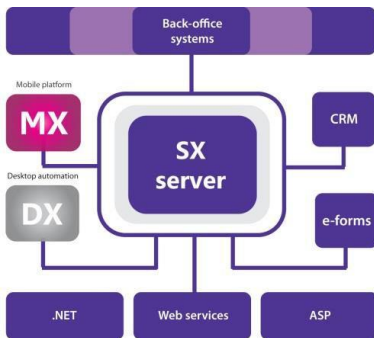


**Business Problem:**
The amount of time taken to collate of information about existing utilities from multiple online sources to produce the information packs necessary to ensure safe digging.

**Business Solution:**
Application integration software to automate much of the effort and dramatically reduce the time required to collate the information.

## Background

For each road maintenance job or emergency call out carried out by one of its teams, Amey UK has to produce Safe Dig Packs, giving details of utility supplies in the area. Previously this was a laborious manual process. Now, using NDL's awi$^{sx}$ integration toolkit, it has automated the process of how these are produced, which has resulted in a cost saving of £240,000 a year. This has also enabled a more timely response to emergency repair requests and has improved management information.

## Pre-existing Business Process

Amey's teams dig up a huge number of roads across the country: on average, there are around 280 different new jobs happening daily. These are either planned maintenance tasks or emergency call outs if, for example, there is a water leak or disruption to electricity or gas supplies.

For each job, the site has to undergo a scrupulous check before digging can start. There has to be a coordinated review of all mains supplies, cables, etc. in the area to minimise risk of injury or

disruption to services by accidentally hitting a pipe or cable.

To do this, Amey retrieves maps from the central records of each relevant utility for that specific job: this can involve up to five different utilities per job. This therefore could result in as many as 1,400 maps being produced in any one day.

This process was previously extremely laborious. A member of the administrative team would access each supplier's website, put in individual credentials and coordinates, print out each map and compile them into a Safe Dig Pack. It was estimated that it took 23.3 hours to manually retrieve all the maps needed for one day's jobs. For emergency call-outs in particular, this had serious implications for response time.

The decision was therefore taken to replace this with an automated process. There were three aims: to reduce the time taken to source the Safe Dig Packs; to ensure emergency requests were prioritised; and to save money, making contracts more revenue-efficient.

## The Solution

After a review of the market, Amey identified that awi$^{SX}$, NDL's integration toolkit, would best support this move to an automated process. awi$^{SX}$ is a cost effective, flexible and versatile alternative for integration which avoids the need to use individual vendor APIs or adaptors. It links to and from the front office or joins back-office applications together, dramatically improving business processes and workflows.

Now, all contracts are held in a central Amey portal. Using awi$^{SX}$, one set of credentials, coordinates and other details for a job are automatically populated as appropriate in each relevant utility supplier's website, mirroring exactly what was previously carried out manually. The relevant maps are then retrieved and sent back either as a PDF or image file; these are then printed out as a complete Safe Dig Pack.

## Benefits

As a result of implementing awi$^{SX}$ to automatically retrieve and print maps for the Safe Dig Packs, Amey has achieved a number of savings and efficiencies:

- It is estimated that the time taken to produce all the maps needed for one day's jobs has been reduced from 23.3 hours to 9.3 hours, representing a total time saving of 14 hours per day. This has achieved a cost saving of £240,000 per year

- The equivalent of 12 staff have been re-directed to other work as they are no longer needed to retrieve maps manually

- Health and safety regulations demand that map packs are provided to gangs before they can start work. These are now provided on a far more timely basis: in particular, the automated system is able to run on a 24-hour rather than a nine-to-five basis

- There is now a far speedier response to emergency repair requests.

- There is an improved audit trail, enabling better reporting and performance data

According to the Web/Central Development Manager at Amey UK:

"*Using the new process brings much improved efficiency to the business and is a major cost saving. It has allowed us to drive efficiencies in the team, and enables us to retrieve these maps in good time with limited effort compared to how we did it previously.*"

For more information visit www.ndl.co.uk or contact info@ndl.co.uk.