

# TeamDB - unified neighbourhood team database

## Overview

CrimeMapper, the RKH-developed online crime mapping application, is set to go live nationally later in 2009. Part of the CrimeMapper system allows public users to access local neighbourhood team policing information based on the current map location.

A key aim is to display this effectively and consistently to the public, irrespective of force boundaries, so that the same type of high quality, accurate and up to date information is available across the country. In order to achieve this, neighbourhood team information is required from all forces in the same uniform consistent format.

During the process of gathering and collating individual neighbourhood team data across forces into a uniform format, it is important that the methods used to do this facilitate openness and reuse of the data in future applications, and are simple to achieve in the first place.

## Introducing TeamDB

Recent talks facilitated by the NPIA have led many forces to agree to produce the relevant neighbourhood data in a consistent digital form - a web-accessible XML feed structured using a suitable custom schema.

However, the technical abilities of individual forces are varied:

- some are already using suitable database systems and so are able to produce a live XML feed automatically,
- some have the ability but may require some internal development to produce and publish the XML,
- others have no ability to produce the XML feed at all, and currently 'hard code' their neighbourhood information directly into static pages on their website

TeamDB is a web application that aims to address these problematic differences by bringing less able forces up to speed quickly and easily through a web interface.

## Outcome of using TeamDB

The result of implementing TeamDB will be a single uniform source of accurate and up to date neighbourhood data that is readily available for reuse in CrimeMapper, future NPIA applications and by individual forces.

## TeamDB features

The focus of TeamDB is flexibility and simplicity - it must cater for the needs of less advanced forces. We have split forces into two groups - 'novice' forces unable to produce an XML feed, and 'advanced' forces who can produce an XML feed (and maintain it over time).

TeamDB is web-based - there will be no IT requirements at the force end (no software to install, maintain and keep up to date), other than ensuring that a key contact has access to a modern web browser and is able to access the internet.

Features aimed at both audiences are described overleaf.

## Novice forces

Novice forces are classed as those that are unable to produce an XML feed because they either do not store their neighbourhood information in a database, or are unable to easily publish their database as XML. We have assumed that these forces are basically starting from scratch and need some way of specifying neighbourhood information in an easy to manage form.

The TeamDB web interface will allow novice forces to quickly and easily:

- Add and manage an unlimited number of neighbourhood areas that match their force structure
- Make unlimited edits to any number of neighbourhood areas
- Provide key information relevant to that area (see appendix A, an RKH specification document regarding information that appears in the 'Find Out More' tab of CrimeMapper at NPT level)
- Add and manage an unlimited number of officers within any neighbourhood area:
  - Manage officer details and which areas they belong to
  - Upload officer images or refer to the URL of an existing image within their own force website
- Make unlimited edits to individual officer information
- Batch-add officer information across multiple areas:
  - Download an empty CSV template to assist with population at the force end
  - Upload a full CSV file with many officers to save time adding them individually

## Advanced forces

It is assumed that these forces will have already produced their own valid XML feed of neighbourhood teams and are able to publish this online. It is important that in these cases, forces are not required to maintain their neighbourhood information in two places.

To include their data in TeamDB, they are required to specify the location of their XML feed on the web. TeamDB will periodically access the force-managed XML feed and import it, ensuring that the TeamDB database is kept up to date.

Forces wishing to switch to advanced mode from novice can do so at any time.

## Mockups

We have produced these mockups to help visualise how the web-based TeamDB interface could work for forces. Features are subject to change, depending on specific requirements (XML schema, etc.).

The screenshot shows a web browser window titled "TeamDB" with the URL "http://teambd.rkh.co.uk/". The page header reads "Leicestershire Constabulary TeamDB" with links for "Settings", "Help", and "Log Out". Below the header is the section "Your neighbourhood teams" with an "XML feed for entire force" link. The main content is a table with 10 columns: Name, Overview?, Local Priorities?, What we've done?, Get Involved?, Policing Pledge?, Links?, Officers, and Updated. Each row represents a team, with checkboxes in the first column and various status indicators in the subsequent columns. The "Updated" column shows dates and times, such as "04/06/09 13:37".

	Name	Overview?	Local Priorities?	What we've done?	Get Involved?	Policing Pledge?	Links?	Officers	Updated
<input type="checkbox"/>	<a href="#">City Centre</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">No</a>	<a href="#">No</a>	<a href="#">Yes</a>	<a href="#">No</a>	7	04/06/09 13:37
<input type="checkbox"/>	<a href="#">Melton Rural North</a>	<a href="#">Yes</a>	<a href="#">No</a>	<a href="#">No</a>	<a href="#">No</a>	<a href="#">Yes</a>	<a href="#">No</a>	2	01/06/09 11:51
<input type="checkbox"/>	<a href="#">Melton Rural South</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">No</a>	1	29/05/09 18:12
<input type="checkbox"/>	<a href="#">City Centre</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">No</a>	<a href="#">No</a>	<a href="#">Yes</a>	<a href="#">No</a>	7	04/06/09 13:37
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<input type="checkbox"/>	<a href="#">Melton Rural North</a>	<a href="#">Yes</a>	<a href="#">No</a>	<a href="#">No</a>	<a href="#">No</a>	<a href="#">Yes</a>	<a href="#">No</a>	2	01/06/09 11:51
<input type="checkbox"/>	<a href="#">Melton Rural South</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">No</a>	1	29/05/09 18:12
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Fig. 1: All forces have access to a control panel that gives an overview of all neighbourhood teams. Forces can easily see which areas are lacking content, and can click to directly access the editor for any given page or team. Columns can be sorted to, for example, show the most recently updated teams.

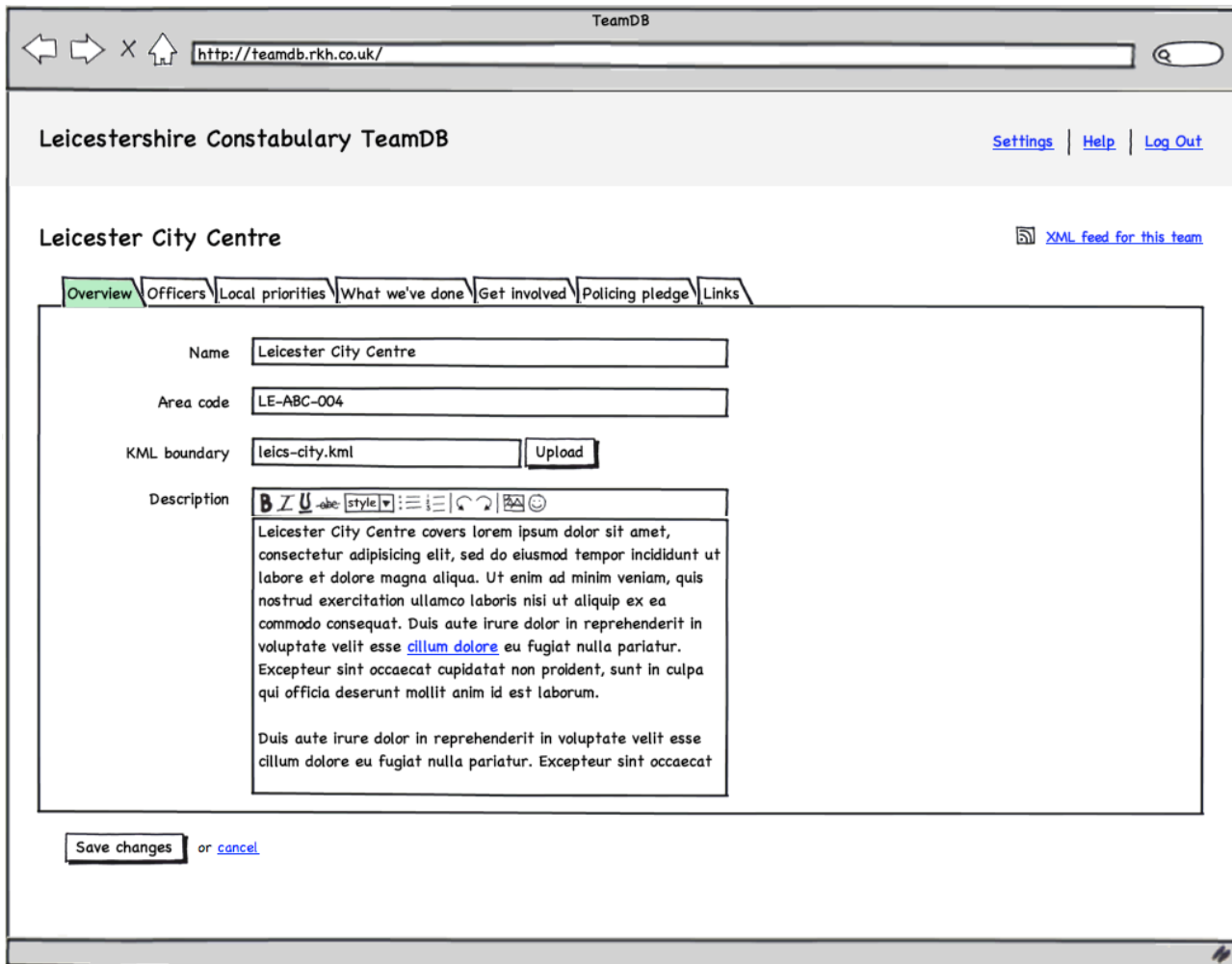


Fig. 2: Each neighbourhood team is split into logical tabs, allowing forces to quickly browse between different types of data. The overview tab shown allows forces to specify key parts of information about the area.

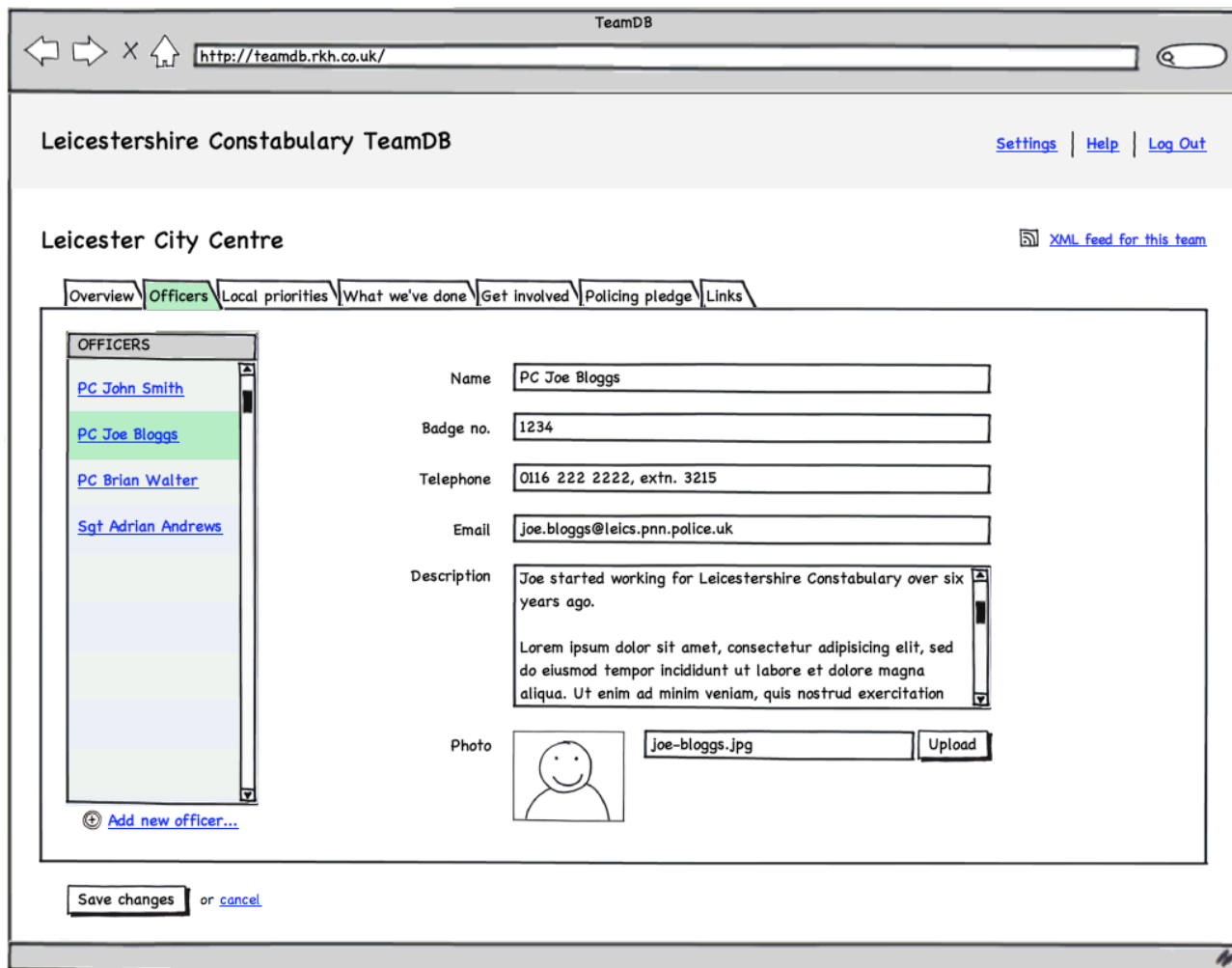


Fig. 3: Individual officers can be added directly to a team or created as required. Once created, they can be dragged into a specific order. TeamDB can also be used to host officer images, or forces can specify a URL to the image on their own website.

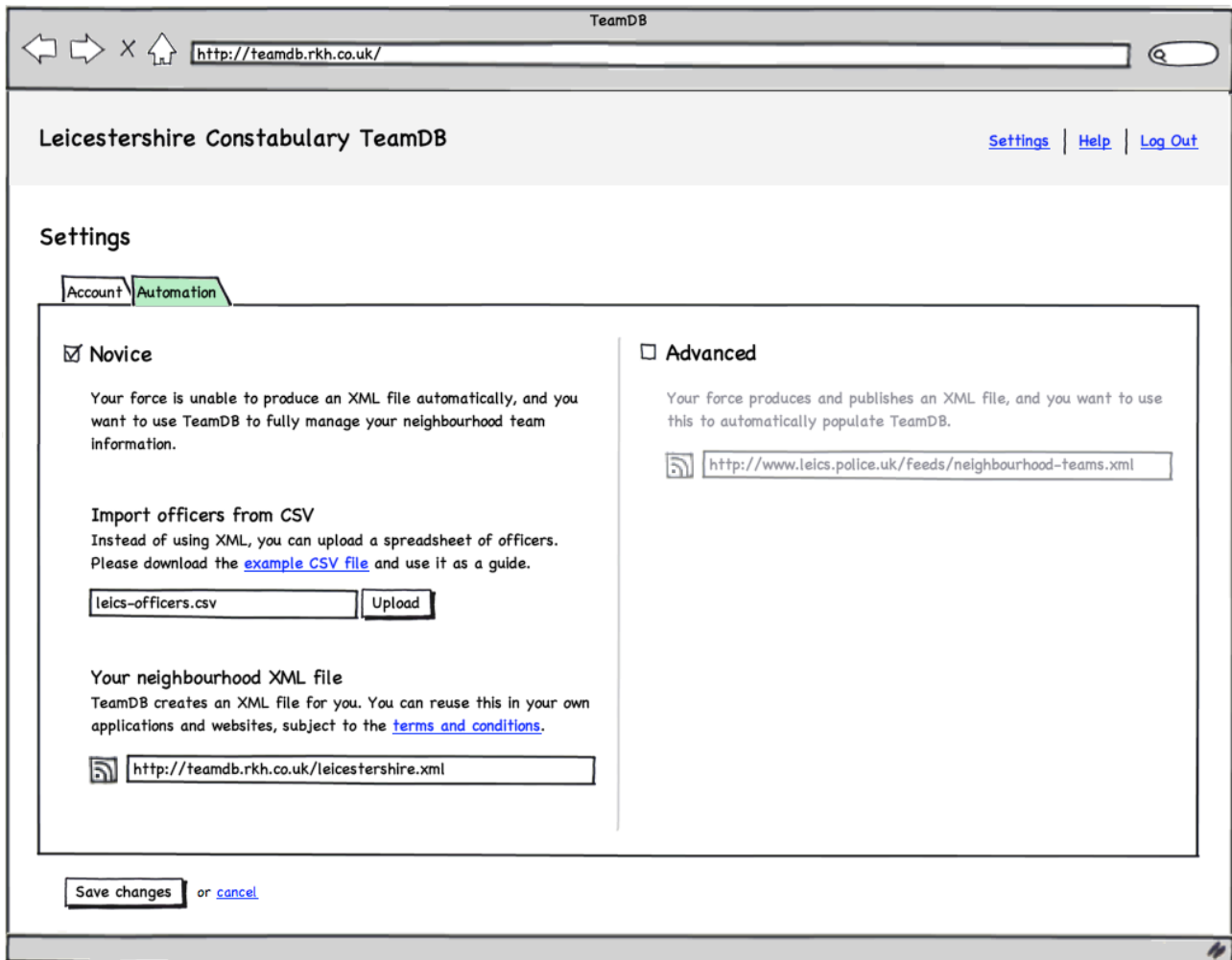


Fig. 4: The settings page allows forces to easily switch between one mode and the other. Here, the force has opted for novice mode, so they are able to import officers from a CSV file, or even reuse their new TeamDB-produced XML feed in other applications. Advanced forces just need to specify the URL of their XML feed.

**What TeamDB gives back**

With a single unified data source for all neighbourhood teams in England and Wales, CrimeMapper is able to use the data within the 'Find Out More' tabs, without requiring forces to separately manage or re-key the information in multiple systems.

Additionally, those forces previously unable to produce an XML feed will now have one that mirrors the same feed made available by those that can do it themselves, along with hosting for their officer images.

**Ultimately, TeamDB will result in every single force being at the same level in terms of published neighbourhood data.** Novice forces could potentially then reuse their own TeamDB XML feed within the pages of their own site, with little or no extra cost or IT requirement at the force end.

## Future options

Bringing together all neighbourhood team information in a clean, uniform format allows for easy to implement future developments. The ideas below would need to be separately quoted for, but we would ensure that TeamDB was extensible enough to facilitate them.

### Further assistance for novice forces

Some forces may never be able or want to produce their own XML feed. In those cases, the forces would be able to cut and paste 'live snippets' of HTML from TeamDB directly into their own websites. If any data is altered via TeamDB, it is automatically reflected on their own website. This could come in several flavours, dependent on force abilities:

- Basic embed code - forces customise how the team information looks via TeamDB to match their own website
- Normal embed code - team information is pulled directly into the force website, where styles applied at the force end define how it looks
- Advanced embed code - individual XML or JSON feeds could be returned, allowing forces to further manipulate the team information at the force end

### Web service and API

A full web service and set of APIs could be developed that would allow forces (and potentially other organisations) to fully query and return results from the complete data set that will be held by TeamDB. This has many applications:

- Localised neighbourhood websites with accurate embedded police data
- A national officer contact directory
- Geographic equal opportunities monitoring by analysing race/gender/etc. of officers in relation to areas

These are just a few examples, but there are many more possibilities yet to be realised that a valuable dataset like TeamDB could provide via an API.

## Appendix A - Data shown in CrimeMapper at NPT level

The following data categories are recommendations made by RKH for data stored at NPT level - TeamDB will facilitate these where relevant.

- **Overview of neighbourhood area** - including any stations or points of contact relevant to this area
- **Neighbourhood team profiles:**
  - Name of officer (e.g. 'PC John Smith')
  - Photo of officer (and default silhouette image if photo not present)
  - Badge number of officer
  - Contact details (e.g. telephone and email)
  - Short biography (e.g. 'I joined the force in 1989 and love the area I work in. If you ever see me on the beat, please say hello' etc.)
- **Local priorities** - a list of priorities and how the local team are tackling them
- **Events and meetings**
- **What we've done** - previous priorities, how they were addressed and the eventual outcome and improvement
- **Get involved** - Calls to action and ways to contribute to the issues within an area
- **Policing pledge** - standard policing pledge for the force
- **Links to websites relevant at this level**

**Appendix B - Assumptions****RKH will:**

- Design and develop TeamDB
- Host officer photographs uploaded via the novice interface
- Generate and host web accessible XML feeds for all forces

**The NPIA will ensure that:**

- All forces are aware of the requirement to either manage data via the TeamDB interface, or by providing TeamDB with their own XML feed

**All forces are responsible for ensuring that:**

- Neighbourhood data is accurate and up to date
- The relevant contact at the force has login access to TeamDB
- The TeamDB login details are maintained properly and securely

**Novice forces are responsible for ensuring that:**

- Any officer CSV upload file generated meets the system requirements in the template

**Advanced forces are responsible for ensuring that:**

- Their XML feed meets schema requirements
- Their XML feed is freely available via an HTTP web URL
- Officer photos and other files referred to in the feed are hosted reliably