Enterprise Forms Server - Hardware/Software Requirements

Server O/S

The application requires Windows Server 2008 (32 or 64 Bit) and above. The webserver software required is Microsoft IIS7 and above (included free with Windows Server).

Application Software

The form application is written using a combination of ASP 3.0 and ASP.Net (framework 4.0) and uses proprietary ActiveX components (written in C++).

The server application that acts as a "go-between" between any internal processes, and the public facing forms system, is written in VB.Net (running as a Windows Service handles export to back-office systems as PDF, TIFF and XML.

Database

The system requires a database in which to store form and user data. The application code is written in standard SQL - therefore we can link up to a range of databases (including Oracle, MySQL and IBM's DB2). Our preference though is for Microsoft SQL Server.

An organisation may be covered by an existing SQL Server license. However if no licence is available we recommend Microsoft's SQL Server Express. This is supplied free of charge by Microsoft, and has the same functionality as the full version of SQL Server. The only limitation is the size of the database - 10GB. This would allow storage of around 200,000 forms – which should cover a good few years' use. A number of our customers work with this free database and we have not encountered any problems at all.

If required, the database can run on the same server as the form application without difficulty.
If a database is not available immediately, the system will run off an Access database during the development/testing period.

Email

The application sends out emails. This can be done using the application server itself or emails can be routed through a separate SMTP server.

TXT Messaging

Enterprise Forms Server allows text messages to be sent to users of forms. This is done to send a reference code to retrieve a saved form, or to send a reminder if a user has not completed a part-filled form. The system works with a third party SMS Gateway provider (Clickatel). The organisation itself will be expected to create an account with Clickatel to use this feature (costs are typically around 2 pence per message). Victoria Forms can also link to other SMS gateways if useful.

Processing Load

Regarding server processing requirements - our E-forms are unusual in that once a form is opened on screen; all of the pages are stored in browser memory, so the user effectively fills in the form offline. The server only gets called when the form data is submitted. Processing of form data will only take a few seconds of processing time. It is therefore quite possible to have dozens (even hundreds) of concurrent users filling in forms and the server will cope.

Therefore server-processing requirements are minimal.

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A number of our customers successfully run the application on server that is shared with other applications. However, it is possible for other applications to conflict with our own, so for ease of trouble-shooting we prefer that the main application is provided on a dedicated server. Note: the system is fully compatible with Virtual Servers.

Bandwidth

The recommended minimum bandwidth for a server is 500Kbs

Hardware

As a guide, the following hardware would be more than adequate for the application's processing.

1. Memory Size: 2 GB
2. Hard Disk: RAID SCSI Hard Drive 60 GB
3. Processor: Pentium Dual Core, Xeon, or i3 Processor at 2.0+ GHz or AMD equivalent.

External Server

If required for public access, a mirror copy of the application can run on an external server, outside of the organisation firewall. This allows for a very secure, fail-safe set-up.

The external server stores submitted forms as encrypted data files. Every few minutes the internal server sends a request to the external server to see if any forms have been received. If so, they are brought across the firewall over HTTPS. A shared server (that is not *too* busy) can host the external application if required.

Exporting

Forms may be converted into PDF or TIFF format for exporting into document systems. The system tracks each form to ensure that the export succeeds.

Form data can be converted into XML format. We supply an add-on module which generates data in a variety of XML schemas, and can connect and automate processes with a variety of back-office systems. These include systems form Northgate, Civica, Capita and IDox.

Website

The system generates a form library page, which includes links to all of the forms available to the user. Each form is categorised and can include a description.

In addition links can be made direct to forms from within a council website e.g. information about housing benefit can include an "apply online" button.

Browsers

eForms forms work with all modern web-browsers including Internet Explorer, Firefox, Chrome, Safari and Opera. For users accessing forms through a Smartphone, the server identifies the device, and adjusts he form to suite the smaller screen. Text and fields appear in a single column, for vertical scrolling only.

For users with older browsers, for those that have JavaScript disabled, or for visually impaired users accessing forms through screen-reading software, forms can be displayed as traditional HTML web-forms, with intelligence handled on the server.

Enterprise Forms Server - Hardware/Software Requirements

Hosting Options

A variety of server setups are available: with hosting provided by the Council IT Department, by Victoria Forms, by a Third Party Host, or a combination of these. The main configurations - Council hosting or Victoria Forms hosting - are detailed as follows:

Victoria Forms System Hosted by the Council

The Victoria Forms server software can be installed on a Council's own servers within their network.

Schematic shown on following page.

For public facing access, a Victoria Forms system is installed on a Public facing server, placed within a DMZ. Members of the public can access eForms via a browser and complete and submit them. Access is through HTTPS.

The main Victoria Forms system is installed on a server within the Council's private network where Council employees can complete assisted forms. This server will be setup to connect to the Public Server every minute and download all submitted forms from the Public Server.

The Private Server will store completed forms in a SQL Database, and restrict access for Council employees only – only authorised users will be able to login to the software and access forms.

Once forms are submitted and are on the Private Server, the software can generate PDF's or TIFFF copies of the submitted forms which can then be indexed into Document Management System. Alternatively files can be saved in a Council network folder, where staff can manually process forms.

For certain form processes, XML data can be generated by the Private Server which can be sent directly into back office systems to avoid the need for rekeying data. With a setup where the software is installed within the Council's network, the sending of XML data is done directly to the back office systems exposed web services (APIs).

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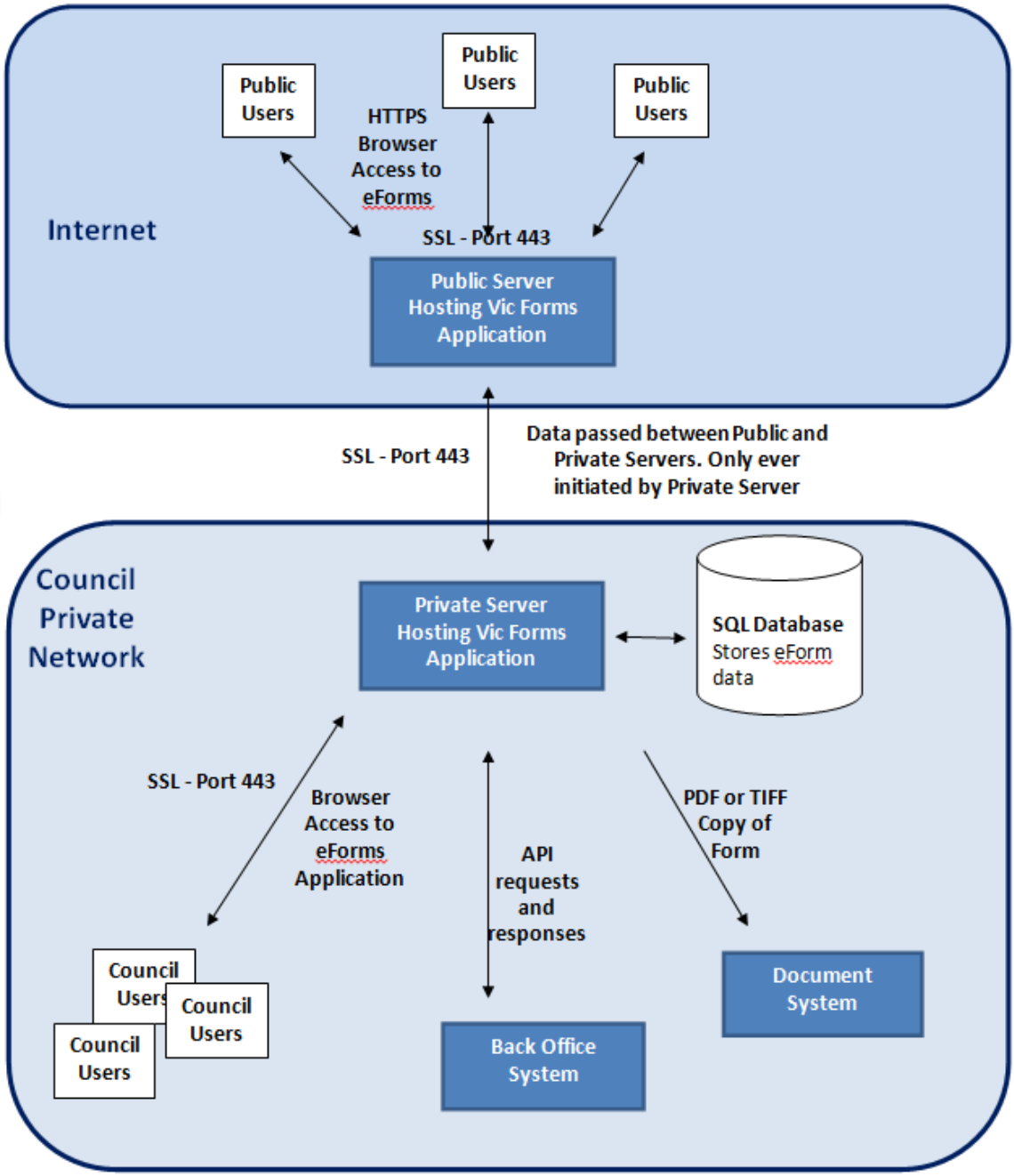
Council Hosted Setup



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System Hosted by Victoria Forms or Provider Outside Council Network

Here the Victoria Forms system is hosted on either Victoria Forms own servers (these are leased from United Internet in Gloucester). Alternatively, the software can be installed on servers provided by a hosting company of the Council's own choice.

Schematic shown on following page.

For public facing access, a Victoria Forms system is installed on a Public facing server, which is accessed by members of the public via HTTPS to their browser. They can fill and submit forms.

The main Victoria Forms system is installed on a server within a private network. This server connects to the Public Server, every minute or so and downloads all submitted forms from the Public Server.

Authorised Council staff can login to the main Private Server, and fill, view, submit and download forms, PDFs and TIFF versions.

Where XML data is to be sent to back-office systems, or where PDF/TIFF files are to be sent to a Document System, or simply brought into a Council network folder, then Victoria Forms supplies our Go-Between Application. This is a simple program that runs on a server within the Council network.

The Go-Between application downloads XML data from the Private server and then posts it to the back office systems exposed web services. It then relays the response XML to the Private Server.

In addition, the Go-Between application moves PDF and TIFF files from the Private Server hosted by Victoria Forms, into the Council network, to send them to a Document System or network folder.

Alternative Option

As an alternative to the Go-Between application acting as an intermediary between the Victoria Forms Private Server and the Council back-office systems, there is also the option of setting up a site-to-site VPN connection from the Council's network to the Private Server. This allows direct communication with the Council's back office systems for integration purposes.

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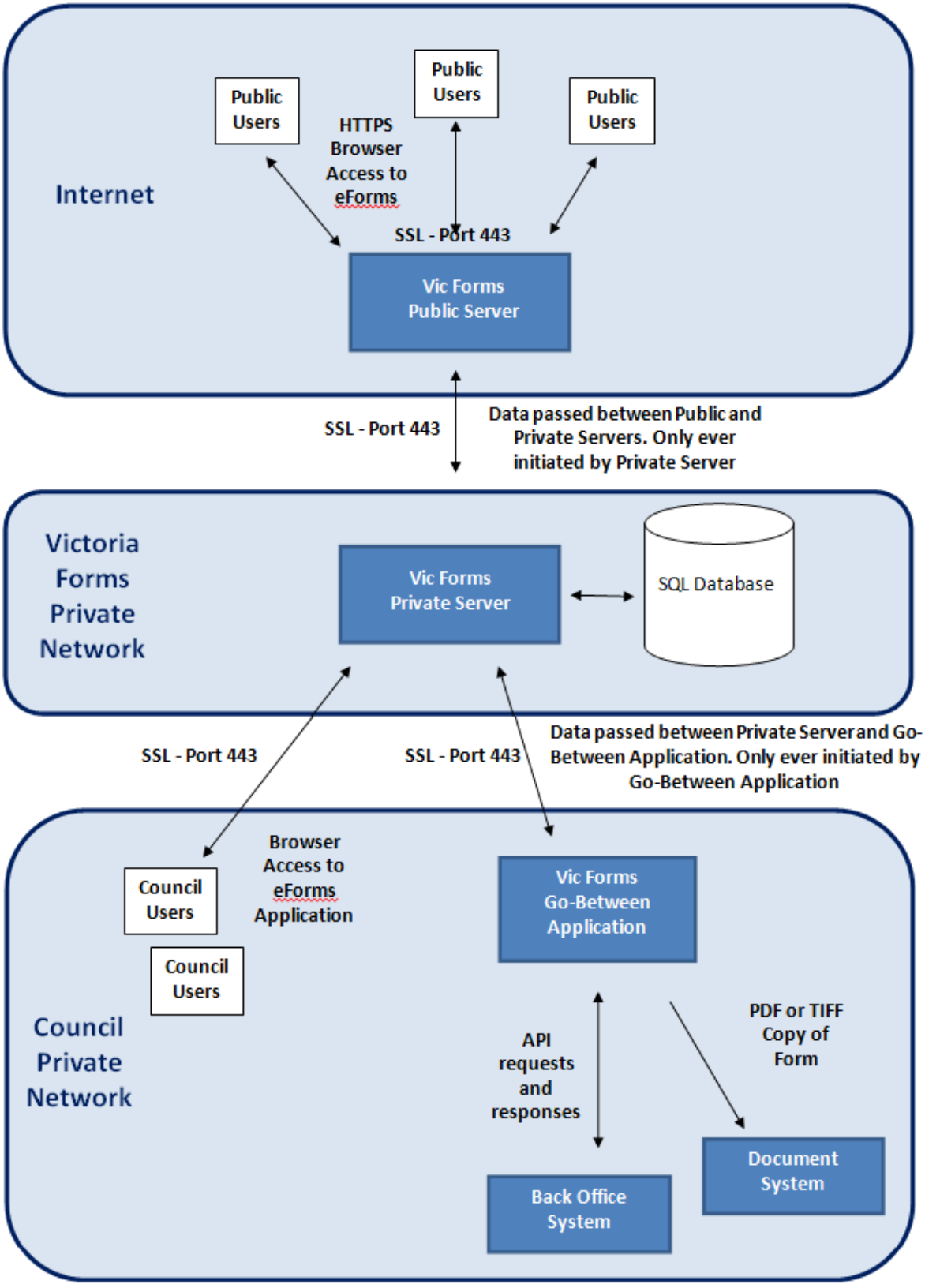
Victoria Forms Hosted Setup