

SARDON TECHNOLOGIES

making the web work for you

Updating Client Data Using the Internet

The rapid growth in broadband connections has opened up new applications for the internet. One of these is keeping your clients updated with the latest information by using upgrade "modules".

While many companies have websites that act as online information centres showing company products and services, many others also supplement this information with programs delivered on CD-ROM. There are often good reasons why CD-ROM delivery is preferred to internet delivery, not the least of them being the comparatively slow speeds of the internet in Australia compared with programs running directly from CD or installed to the user's system. Eventually when internet bandwidth (speed) reaches a satisfactory level (most broadband in Australia still travel at between 250 -500kb, a snail's pace compared to services offered in Europe, parts of Asia and the USA) all components can be delivered via the net, however until then CD-ROMs will still have their uses.

If considering distributing programs or information on CD-ROM, you should now consider designing the product for the future. For example if you are sending your clients a CD-ROM with information you know will become outdated in a few months (or longer) you should consider building into that CD-ROM the ability to upgrade its data from the internet when the time comes.

How can this be done? Consider the following example. (Also see block diagram fig 1)

The distribution CD-ROM is authored to contain a number of modules which include:

1. Auto run facility to display an introduction or a product demonstration. This may be an opening video clip, animation, advertisement or a description of what the CD-ROM is about. Remember a CD-ROM has a capacity of over 700Mbs and if you have the space you should put it to use. It costs the same to duplicate a disk containing 700Mb as it does 100Mb.
2. A menu section. From here the disk's functionality is accessed.
3. An install option (usually from the main menu) This installs the CD-ROM to the user's system. Note: this may or may not contain the "demo" section. The program will now function from the user's system without the need for the CD-ROM. (note the variations on this listed further on)

4. The data section. This is installed to the system automatically during the installation process. The data can be in many forms, including document files such as PDFs, Word Docs, spreadsheets, animations, videos etc.
5. An “update” menu area. This forms part of the installed program and is listed from the main menu. It allows the user to access the internet, go to a secure upgrade area of the CD-ROM publisher’s website, where the update modules are available. These are downloaded then installed on the user’s system using a self install program which automatically removes outdated data and replaces it with upgraded information

If you intend providing an upgrade capability, you should also plan:

1. The structure of the CD-ROM. It must be authored with updates in mind – irrespective of whether you currently have the facility to do upgrades from an existing web or FTP site. This will pay dividends later.
2. The installed program and data needs to follow an established architecture which must be documented by your software authors. This is vital to permit the later design of the upgrade modules.
3. You will need an “update” area created on the internet – this can be on an existing website or a new area created specifically for this purpose. It would be preferable if the actual web address is known at the time of authoring, however this is not vital and can be worked around. Remember the upgrade area can be created after the CD-ROM is distributed, often essential data isn’t outdated for several months or longer.
4. You may decide for security purposes to use a registration facility when installing the CD-ROM to the user’s system. There are a variety of techniques for this, including entering unique registration numbers, requiring the original CD-ROM to be in place when using the system (even after install), USB token devices – all of which have merit depending on your requirements.

There are many variations to this, however if distributing information on CD-ROM you should consider adopting a format and architecture that will allow future on-line updates where possible. The additional cost of doing this may be negligible when compared to distributing fully revised CD-ROMs at a later date.

It is important to design the CD-ROM correctly, if possible by breaking down as many components into modules that can be speedily downloaded via the internet when updates are required. Experience has shown that in many instances only a small percentage of data must be replaced to keep a product updated.

Case Studies

Case 1.

In 2003 an Australian organisation with over 2000 members issued a reference manual on CD-ROM to all members. The manual consisted of a series of video lectures, supported by Powerpoint presentations and 50 reference texts (delivered in PDF format). It was found after two years that changes in legislation meant that the information supplied needed revision on average at 3 month intervals. Issuing revised CD-ROMs on a 3 monthly basis was becoming an expensive exercise, so SARDON was consulted and requested to rework existing material to provide for internet up-dates.

SARDON was able to demonstrate a working Beta model within 10 days and subsequently created the next version of the course on CD-ROM to allow for future upgrades. A month after issuing the revised disk, the web end secure update area was completed, all clients were issued with user names and passwords, and updates were made available as legislation was revised.

Experience has shown that an average of 4 data files (in this case PDFs) need revising every three months. The cost of doing this work in house is estimated at less than \$500, and as the updates are internet delivered there are no media or distribution costs. This compares with approximately \$6000 for re-authoring, stamping and distributing by mail a new CD-ROM containing the revised files – **a saving of \$5500 every quarter.**

Case 2

An Australian distributor wanted its 300 sales agents nationwide to maintain a catalogue of products – the total number of items exceeding 5000 SKUs over a range of 70 product categories. The distributor already had a comprehensive website that sales agents could log onto, however with over 100 of its sales agents in country areas with slow, or unreliable internet connections it was found that referring to the master website was often impractical in these circumstances.

In addition some of these sales agents often travelled to areas where there was no internet connectivity and they needed to ensure that the reference information contained in their lap top systems was as current as possible.

To achieve this the company engaged SARDON to redevelop the website with the aim of providing on-line updates. This proved to be a relatively simple task as the website had been constructed in a manner that allowed it to be easily packaged into “deliverable modules”. An additional password entry area was added for client update access and the website packaged onto a CD-ROM which was delivered to those sales agents requiring it. The website was then installed in a slightly modified off-line version.

The procedure now is that agents in remote locations run the catalogue from the website version that has been installed locally. This means that the catalogue runs faster and they do not have to bear the costs of being continually connected to the web. When updates are available all agents are advised via email, (these advisories are also repeated in the online website), and they log on and download the applicable updates, then return to using the catalogue offline.

The offline version also has an automatic check feature that references the online site in the background, whenever the agent goes online to the master website. This notes the status of available updates and advises the user when new updates are available.

Also before travelling to locations where there is no internet connection, sales agents confirm the validity of the data within their system before departing. They then use the offline version via their laptop.

Factors to Consider

Security and authentication must always be considered when designing any on-line system. There are many ways of achieving the security required and SARDON can advise on these.

Documentation Tracking

One area often overlooked is ensuring the correct versions of all documents are being issued. Depending on the number of documents within individual systems, various levels of document control, which includes, creation, editing, recording and release procedures, must be considered. There are many excellent off-the-shelf software programs available that assist in doing this, and it is recommended that irrespective of your company's size, you investigate document control. The issuing of an incorrect or outdated version of a document can in some circumstances have legal implications and this must be taken into account.

End