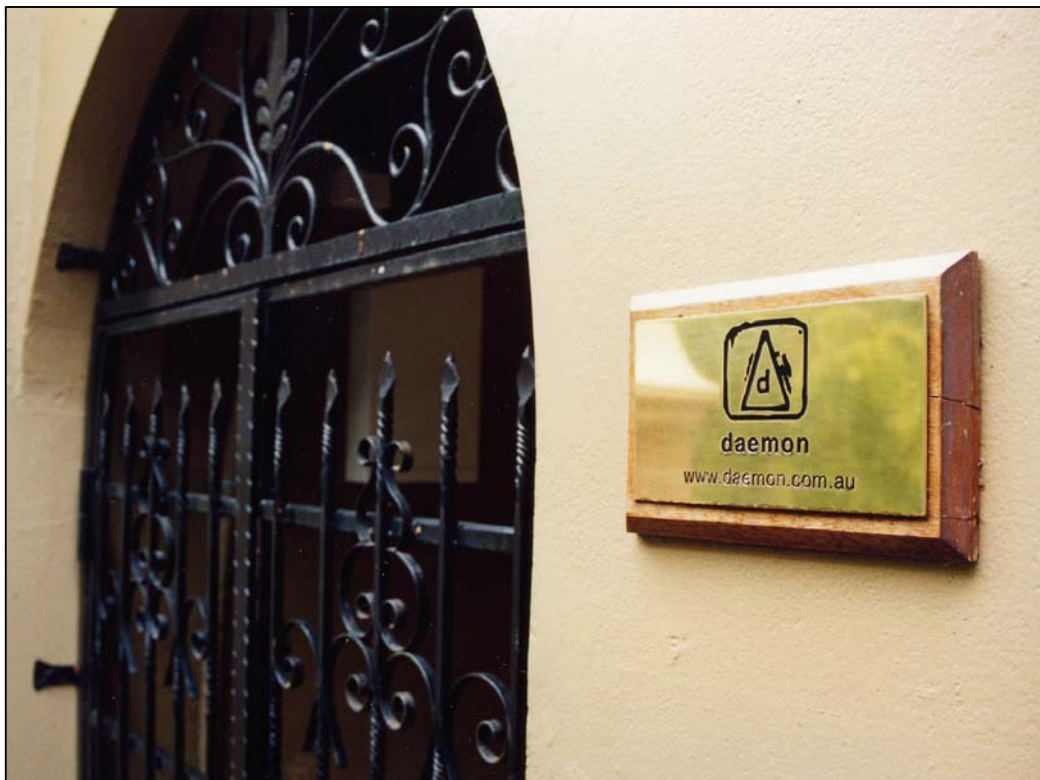# FarCry CMS Features

Daemon Internet Consultants

Prepared by
Geoff Bowers, Chief Architect

December 2003
FarCry CMS v2.0
http://farcry.daemon.com.au/

daemon
serious web development.

> "Content management applies technology to automate the most tedious parts of the old handcrafted approach. It helps you define a system for maintaining your site designs separately from your server code, which is kept separate from the content created by your authors. It provides the means and the opportunity to make your site into what you want it to be: usable, attractive, localized, accessible, fast, and up-to-date."
>
> Chapter 1: "Foundations of CMS" of the glasshaus title "Content Management Systems", ISBN 190415106X

Copyrights

What is the source of this FAQ?

The source of this FAQ is based on a list of questions presented in the book Content Management System© 2002 Glasshaus. The answers provided here were prepared by Geoff Bowers, Chief Architect of the FarCry CMS. The answers remain the property of Daemon Internet Consultants.

Objects of Content

Which types of Content is managed by the CMS?

FarCry manages all manner of content types. Out of the box FarCry ships with HTML web page, News, Events, and Facts just to name a few. FarCry's framework also allows for developers to add additional custom types and even integrate external information and applications through our portal tools.

Is it possible to create lists (e.g. a list of news items)?

Yes, any content type can be used to create a list. Lists can be generated dynamically based on the categorisation or metadata associated with the content. For example News can be listed by publish date and categorisation. There are also many other listing options including randomly pick an item from a pool of content, display a list of events in a calendar format, and so on.

Are there options to search, sort or filter a list automatically?

Yes. The administration area provides a comprehensive search and filter options for locating content. In the presentation layer, authors can filter lists by any number of mechanisms. Full text search is available for all objects in the FarCry system.

Is it possible to split large lists into several pages?

Yes. Lists of objects can be split into multiple pages with intuitive pagination menus. In FarCry this is sometimes known as a list archive.

Can I reuse a content source within several pages?

Yes. You can reuse and repurpose content in all manner of ways. This can be done by a non-technical contributor on an item by item basis, or dynamically using the in-built content classification system.

daemon
serious web development.

Authoring Interface

Does the authoring interface make sense to non-technical users who are familiar with a particular word processor, such as Microsoft Word?

Yes, we've invested a lot of time trying to build an intuitive authoring environment specifically for non-technical contributors. Content is managed through a simple wizard interface that takes authors step by step through the content management process. Advanced options are also provided for more proficient authors to allow them to further increase their productivity.

Plus developers can quickly build their own wizards and authoring interfaces with the tools provided in the FarCry development framework.

Does the content interface provide WYSIWYG editing functionality?

Yes, FarCry is bundled with the SOEditor Lite WYSIWYG editor by default, because its free and we have permission to distribute it. Additionally, you can also integrate third party editors, including SOEditor Pro, Ektron, SPAW and many more. A comprehensive list of third party WYSIWYG HTML editors is available here: http://www.bris.ac.uk/is/projects/cms/ttw/ttw.html The list of pre-integrated editors for FarCry is growing all the time so be sure to check the developer list to see if your preferred editor has already been made available.

Is the CMS compatible with HTML code as content?

Yes. FarCry is compatible with both HTML and XML as content.

Is content previewed using the same template performed as published version?

Yes, content can be previewed using the same template as the published version.

Is there a check-in/check-out mechanism to avoid modifying the same content simultaneously?

Yes, FarCry locks content that is currently being edited.locks fields when being modified or approved. Fields uses by other users appears in red and can not be edited simultaneously.

Site Structure

How does the CMS allow the author to manage the site structure?

FarCry has a comprehensive site hierarchy tools. Contributors with appropriate privileges can change the site structure at will using a simple drag and drop interface. Permissions can be applied to any section of the site to create restricted extranet areas or provide specific authoring privileges FarCry simply excels at site structure management.

Is a visual hierarchical view of the site structure available for the administration interface?

Yes, administration tools go beyond those mentioned for contributors above. FarCry administration has a very strong focus on the site information hierarchy.

daemon
serious web development.

Can the CMS perform the site tree as a navigation system for my live site?

Yes, of course! FarCry provides out-of-the-box tools, tag libraries and publishing rules to create dynamic menus, paths and site maps in your web site. The sample solution abounds with examples of how to put these tools into practice for both developers and non-technical users alike.

Does each point on the site tree correspond a page as well as a folder?

Not exactly. FarCry represents this information to the contributor as a folder and page in the authoring environment, because we believe this is an intuitive metaphor. But behind the scenes FarCry assembles content from content objects in a database backend. Therefore, there is no need to map pages to specific files and folders on the file system. Mapping files has a series of inherent management problems when it comes to moving content and the like. The FarCry FriendlyURL module represents web pages in the system as files within folders for the presentation layer. This is a great feature because it greatly increases the usability of the web addresses for humans and gets great results on search engines.

Can pages or groups of pages easily be moved from one part of the site structure to another?

Yes, indeed. Contributors can move whole sections of the web-site around. The links between pages are created dynamically and so the internal links to web pages are automatically adjusted, preventing "link rot".

Can pages be copied from one part of the site structure to another?

No. The ability to copy content is not yet available. However, it's worth noting that re-using or re-purposing content is possible in a variety of ways. So content copying is seen as a feature enhancement to aid in content authoring not site structure maintenance.

Does the site structure allow template creators to add bread crumbs (by displaying your current location in the site as a list of links backs up the site tree) and does the site map your site?

Yes. In fact this is such a commonly used feature we provide developer API's, tags and sample code to make breadcrumb implementation as easy as possible. The out-of-the-box solution has breadcrumbs by default.

Search Engine

Is the CMS packaged with a search engine?

Yes. FarCry leverages the high performance Verity K2 search engine bundled with the ColdFusion application server. The search index is fully configurable with a web browser for all content types in your FarCry applications, including external document libraries.

Is it possible to search for information within files (Word; PDF;...)?

Yes. The Verity K2 search engine includes document filters that support the indexing and viewing of more than 45 native document formats. Numerous popular document suites and formats are supported, including Adobe PDF, Microsoft Office 95-XP, Corel WordPerfect, and Lotus formats.

daemon
serious web development.

Link Management

How does the system allow authors to create and edit links to other pages within their site and external URLs?

Contributors can select an internal link directly from a visual representation of the site map. External links can be added manually by entering the URL through the editing wizard. Related and other links can also be implemented dynamically by the template system inside FarCry making things even easier for authors.

What happens if an internal link is broken, for example if a page is deleted or expired?

If the link is managed directly by FarCry it will be automatically updated or removed. However, if the link has been hard coded in a free text area, the author will have to remove the link manually.

Does the system check availability of external links, and if it does, how does it notify the user of these broken links and their location in the site?

No, the system does not conduct an automatic check on external broken links.You would need a third-party tool (like Link Lint) to validate external links.

How does the CMS allow the linking of files (for example Word documents, Powerpoint presentations, PDFs) to the site?

FarCry has a file object (called dmFile) that can be associated with any other content type. This allows contributors to upload files through the web browser and associate them with any content type they need, including news, events and web pages.

Can images be links?

Yes, of course. Images can be linked dynamically or manually depending on the template configuration and the HTML authoring skills of the contributor.

Does the CMS provide an interface for creating image maps?

No, FarCry has no built-in image mapping tool. However, contributors can develop image maps and paste them into the content or template developers can build image maps into templates.

Accessing the System

Does the system require installing custom software on an author's or template developer's workstation?

No, FarCry only requires a web browser to enter content. If the contributor wants to use a WYSIWYG rich text editor, typically they would be required to load an ActiveX control or a Java applet in the web browser, but these are not required to enter content. Templates are text files. Template developers can use any standard web authoring environment to develop templates from notepad to Dreamweaver.

If the system is browser-based, what browsers and operating systems does it support?

To the end user, FarCry will support any browser and operating system depending on the templates developed for the application. FarCry administration supports most current web browsers including IE 5+, Netscape 7+, Mozilla 1.3+ and Firebird 0.7+ on the relevant operating systems these browsers available. We've had favourable

daemon
serious web development.

reports in other web browsers. Depending on the web browser some advanced administration functionality may not be accessible.

Is remote access available to authors?

Yes, contributors only require a standard HTTP or HTTPS connection to the FarCry administration site.

Workflow

What does the interface for workflow creation look like?

FarCry workflow is based on three stages:
- Draft Mode (editing allowed)
- Pending Approval (comments only)
- Approved or Published (then automatically versioned and archived)

Can authors create their own workflows?

Contributors can initiate workflows and are offered a list of relevant approvers to request approval for publication (default is all). However, contributors cannot provide significant customisations of workflow without developer intervention.

Can authors update content and save the changes without submitting the content at the next stage of the workflow?

Yes, this is the default Draft mode state within FarCry.

Can comments be attached to a particular stage of the workflow?

Yes, comments can be added at every stage of the workflow, even on the live object.

Is it possible to send documents a stage back if not approved?

Yes, unapproved pages are sent back to draft mode.

Can time limits be put on the different stages of the workflow with notification sent to administrators to flag documents delay?

No, this is currently unavailable. However, it is possible to run reports that show how long an object has sat in a particular state. Such reports could be used to manually or programmatically escalate workflow tasks.

Can groups of pages be passed through the workflow as a grouped package?

Yes, FarCry allows you to request approval and approve individual pages through to entire subsections of the site in one go. However, group changes in status are not identified as a specific change request.

Users and Their Rights

Can I create multiple users with different access rights?

Yes, the FarCry security model is a sophisticated role based framework. FarCry ships with a set of predefined roles within the system and these can be removed, modified or supplemented to suit the final deployment.

daemon
serious web development.

Can roles be created and assigned to users to facilitate the workflow management process?

Yes. FarCry has a permission for each activity in the system. These permissions can be assigned to a policy or role. These roles in turn can be given to a specific group of users. The workflow leverages the underlying permissions framework. Furthermore, the web site hierarchy can be assigned specific permissions -- this allows administrators to create roles for users allowing them to work only within specific sections of the site.

How are users and roles managed?

FarCry can manage users and roles through the web based administration interface. In addition, FarCry can leverage existing user directories such as NT Domain, Active Directory and LDAP. You can even use a mixture of all of these directories to achieve your preferred user management. For example, you might be running a university web site where all students logon using credentials in a campus wide LDAP server but content authors log on using the in-built FarCry user directory option.

Can users be grouped?

Yes, FarCry users are always grouped.

Can access rights to create / modify / delete pages in different areas of the site tree be limited by user / role?

Yes. The FarCry site structure has it's own permissions set that can be assigned to any section right down to the page level. For example, you might create an intranet where the HR department have privileges to update only their subsection of the site and nothing else.

Can access to templates be limited by user / role?

No, if a contributor has access to edit a particular content type, then can select any of its registered templates. Templates themselves can only be installed by an administrator or developer with appropriate access to the application.

Is the CMS user access system compatible with my LDAP (Lightweight Directory Access Protocol) or other directory servers?

Yes, FarCry can leverage LDAP, NT Domain, Active Directory and its own JDBC user directory. In addition, JDBC/ODBC user directories that can express a view similar to the FarCry user directory can also be utilised.

Does the CMS provide any information on authors' performance and content editing history?

FarCry has an inbuilt auditing service that logs every action a contributor might make in the system. The audit log can be reviewed by object or user. Author performance is a fairly subjective term -- ie. it means something different to every client. Certainly FarCry can provide statistics on author contributions and the popularity of their content through the FarCry reporting engine.

Is the number of users supported by the system limited?

No, the FarCry user interfaces were specifically created to support large numbers of contributors and users. In addition, FarCry was built to support very large numbers of content items.

daemon
serious web development.

Can users create other users? If they do, can their user creation rights be limited and controlled?

Only users in a role with appropriate privileges in the system can create new users. The user creation rights of such a user are always at an administrator level. However, custom administration interfaces could be easily built to allow alternative user creation screens.

Is it possible to create GUI interfaces customized for certain group of users (e.g: the GUI would appear with different logos and colours according to a group)?

The content presentation layer can be personalised to a specific group or role. However, the look and feel of the administration interface, although customisable, is the same for all contributors in the system.

Multi-Lingual Content

Is CMS content authoring multilingual?

FarCry is unicode compliant and can accept multilingual content in all content types. However, the content authoring environment is localised to English. A significant effort to globalise the administration interface is currently underway.

How can a multilingual site be generated?

Contributors would create separate branches in the site hierarchy and provide content for each branch in a specific language.

Does the CMS support non-western character sets / Unicode editing?

Yes, FarCry is fully Unicode/UTF-8 compatible.

Version Control

Does the CMS save previous versions of pages?

Yes, FarCry automatically versions web page content when it is sent live. The entire object is archived.

Is the number of saved content versions limited?

No, the only versioning limit is the storage capacity of the database.

Can versions of pages be compared?

Contributors can review the content of individual versions separately. There is currently no way to highlight differences between versions.

Are deleted pages saved for rollback?

No, deleted pages are removed from the database. However, deleted web pages go to "trash", and administrators can recover content from "trash". Once the trash is emptied the content is gone and only a database restore will bring it back.

Does the CMS provide versioning and rollback for non-text assets (images, PDFs etc.)?

No, non-text assets are not versioned.

daemon
serious web development.

Can the audit history of the site be viewed?

The audit history can be reviewed on an object basis, by user and a variety of other reports (for example, failed logons and more).

Can a snapshot of the entire site be taken and used for rollback in the future?

Yes, the entire site is database driven so restoring a backup of the database and any non-text assets (images, PDFs, etc) will allow a complete recovery of the entire site.

Metadata

What metadata can be saved at a page level – keywords, description, live / expiry,...?

FarCry has it's own internal metadata categorisation system which can be applied to any object in the system, including custom objects. In addition, each content type has a set of properties that could also be utilised to provide metadata, although available properties of this nature would vary between content types.

How is the entry of metadata presented to users at the authoring interface?

A category tree for pre-defined application categories or as form fields for data entry. An appropriate UI widget is used for the relevant metadata to make things as intuitive as possible for contributors.

Can metadata be made mandatory for a given page?

By default metadata is not mandatory. However, a developer could customise the relevant content wizard to require metadata entry.

Templates Authoring

How does the CMS present a wide variety of templates to the author?

The contributor is given a drop down list of templates for the content type they are authoring.

Is the author provided with visual previews of templates?

No preview is currently available. However, the contributor can preview the content in the selected template prior to approving the content.

How does the CMS handle paragraph templates within a page?

Each content type can have any number of paragraph or content templates. These can be blocks of text, HTML formatting, or whatever content is deemed appropriate. The primary body editing step of the content has a drop down menu of content templates available and selecting one simply appends the template content to the current body content.

Does the CMS place a limit on the number of paragraph styles on a page or their positioning on a page?

No, the development of templates is limited only by any inherent restrictions of HTML, CSS, CFML and or JSP specifications.

daemon
serious web development.

Is it possible to swap content from one template to another?

Yes, contributors can swap between any templates nominated for the specific content type they are working on.

Template Creation

What languages can be used for template creation?

Templates are written in ColdFusion markup language. (If you are running the Enterprise Version of ColdFusion you could also use an included page written in JSP).

Do the skills required for template creation match those within my company?

Anyone confident with coding HTML or even using Dreamweaver or an equivalent web design IDE can create and edit templates.

What is the template creation interface / IDE (Integrated Development Environment)?

Any standard IDE including Homesite and Dreamweaver can be used to develop templates. FarCry comes packaged with a "webskin" tag library that encapsulates many features like breadcrumbs, site maps, and navigation structures. More complex templates may require an understanding of the FarCry programming API. However, developers can readily build additional tags to simplify template creation for non-programmers.

Can several template creators work on the templates?

Templates are treated like any other part of the code base. If suitable precautions are taken (for example the implementation of code versioning) then any number of template creators can work on the code base.

Does the IDE provide template check-in and check-out to manage multiple template developers working on templates at the same time?

FarCry does not have a specific template IDE. Templates are simply scripts that can be edited using any number of authoring environments. We recommend the implementation of appropriate code management measures to provide checkin/checkout functionality for template creators. CVS is an ideal code management tool.

Modules

Are there any existing template modules that have been previously created?

FarCry provides a sample templates and the webskin tag library. The underlying programming interface provides a vast range of prebuilt functionality that can be readily implemented into template designs. Plus the open source development community is always contributing new code snippets and templates for use by others.

daemon
serious web development.

Graphics and Multimedia

Can uploaded images, or images in media libraries, be manipulated and resized without any graphics editing tools such as Photoshop?

No, images are rendered in templates as is. However, there is an open source plug-in available for FarCry that leverages ImageJ to provide automated generation of thumbnails.

Will the CMS generate graphical title and navigation images in web formats (GIF or JPEG)?

No, FarCry has no out-of-the-box solution for dynamically generating images. However, it would be simple to call a third-party application directly from within a template to generate such content. For example, this has been done by many developers to incorporate Flash navigation within templates.

Can a range of fonts be used to create these images and to match my corporate style?

See above. Obviously CSS can be used to render a range of fonts and styles. FarCry has comprehensive support for the implementation of CSS.

Does the CMS make provision for a shared library of media items?

Yes, contributors can leverage a shared image library managed by FarCry. This might be for convenience or it might be part of a corporate requirement to only use approved imagery. FarCry is designed to handle these and a variety of other situations.

How do Flash movies created by authors and designers function within CMS?

There is a specific Flash object in the system that captures the standard flash parameters required. Contributors can upload and embed references to Flash content directly within their text. Developers can integrate flash within the template's themselves for navigation and the like. Flash is a readily integrated content type for the FarCry environment and has been implemented by many users of FarCry in any number of different ways.

Can the CMS update content within Flash movie templates?

Yes. Provided the movie can be updated using external parameters, FarCry can deliver content as PARAM vars, delimited vars in a text string, XML, web services or through the Flash Remoting gateway that ships with the underlying ColdFusion engine. FarCry likes Flash :)

Publishing Process

How does the CMS transfer content from the author environment to the live environment?

The author and live environment are essentially the same. Content is actually "staged" in the production environment. Content in draft or pending status is not shown to site visitors but appropriately privileged contributors can view the draft content in situ right along with the live content. We call this the FarCry Virtual Staging Environment. Although both authoring and publishing can be done on the single server many clients prefer to have a clustered environment where a single server is dedicated to administrative tasks and other servers to delivering content to visitors. There are many recommended configurations to suit budget, security, scalability and/or redundancy.

daemon
serious web development.

Can content be published from one author environment to multiple live environments?

Yes. FarCry works in a variety of clustered environments. As the content is served fro a database, any live server that can see the database will automatically be updated when new content goes live. Non-text assets stored on the file system (for example images and PDFs) need to be replicated to other servers. Typically in a clustered environment we recommend nominating a single server for administration and having a robo-copy in place to replicate all non-text assets to other servers. Alternatively, assets can be served from a central storage area (eg. SAN) depending on the enterprise configuration.

Multiple Targets

Can content be published with multiple devices and targets?

Yes. The FarCry presentation layer is separate from the underlying data storage. Templates can be built to service any output including WML, XML, web services and so on. Interestingly, FarCry has a specific xmlExport type that simplifies the syndication of content types to XML format -- we provide RSS syndication by default.

Can the CMS create different versions of the same content (for example, a print version or a version for visually impaired users)?

Yes, see above. FarCry ships out-of-the-box with a "print friendly" template as an example. Also, FarCry's CSS integration makes it easy to write presentation layers that rely upon style sheets to provide print friendly and accessible content.

Does the CMS allow to flag the content as being appropriate for a particular purpose?

There is no default option for this (given the functionality of the system as a whole we're not sure you need it). In any event, content types could be customised to add additional properties that could be used to act as a flag.

Integration

What experience does the CMS company have in integrating its system into other software and hardware used in my company? Are there examples of successful integration?

FarCry is written to leverage the underlying ColdFusion application server. The plethora of integration technologies available for this incredible platform are immediately available to FarCry including, Java libraries, web services, XML, SMTP, POP, LDAP, COM, Corba -- the list goes on. ColdFusion is a Sun Certified Java application and so FarCry will run on any Sun Certified J2EE platform, including Macromedia JRUN, IBM Websphere, SunOne, and BEA Weblogics. There are lots of real world implementations across a host of vertical industries -- please ask for examples of successful integrations that match your preferred environment.

What access does the CMS give to its content storage database?

Content storage can be accessed directly via the database -- though we recommend this be kept to read-only access without a thorough understanding of the FarCry system. The FarCry developers API provides components to hook into all facets of the FarCry system, its underlying data layer and application services -- just consult the developer documentation and open code base.

daemon
serious web development.

Servers

Has the CMS company experience in implementing its system at the server / platform / database combination used in my company?

FarCry's only dependence is the underlying ColdFusion application server. FarCry should run within any environment that is supported by the ColdFusion platform. The FarCry database abstraction layer makes it easy to provide support for multiple database platforms. Currently, support has been developed for MS SQL Server, mySQL and Oracle.

Is the CMS server compatible with systems in my company?

Leveraging the underlying ColdFusion technology, support for a multitude of systems and protocols is inherent in the FarCry system. The list of supported protocols and services is too long to mention here, review the Macromedia ColdFusion feature list for a more comprehensive overview.

Can the CMS vendor provide performance statistics for their CMS from a live, high-load implementation?

FarCry works well in clustered environments. There are several enterprise FarCry users who would be happy to discuss their implementations. Please contact Daemon for references.

Does the CMS provide a generic HTML cache proxy to increase performance in read only mode?

Yes, FarCry has a comprehensive HTML caching layer. Caches are held in memory and can be administered from the administration environment. The cache service is sophisticated enough to provide different cache periods for different page regions, page specific caches, section wide or site wide caches, browser specific caches, personalised caches by group or user and more.

Is the CMS multithreaded, and does it support multiprocessors?

Yes, FarCry leverages the underlying J2EE server for multiprocessor support. In ColdFusion Standard this is Macromedia JRUN, on ColdFusion Enterprise this can be any supported J2EE platform. Please review the various ColdFusion performance briefs.

What IT skills are required in my organization to support CMS?

Your organisation requires a working knowledge of your chosen database platform and administration skills for the relevant operating system and server of your server platform. Managing the FarCry application itself requires an understanding of how things work but no particular qualifications beyond "common sense" are required. Skills in ColdFusion development would be a plus to extend and customise the environment -- it is very compelling that ColdFusion is so easy to learn.Commercial support for FarCry is also available.

Can the system provide a remote control to alert problems in the system?

Emails are addressed by default to the FarCry Administrator to alert if an error has occurred to the system.

daemon
serious web development.

Think About the Future

Does the current license cover version upgrades? Does this cover both major and minor releases?

FarCry is an open source solution released under the Common Public License. All future upgrades and patches under this license are free. Commercial support for FarCry is available if you would prefer for patches and upgrades to be professionally managed.

What is the CMS vendor's product roadmap for the system?

FarCry is an open source solution and so feature development tends to be driven by client demand and the various interests of those companies actively extending and building on the FarCry framework. Daemon runs and maintains the FarCry common code libraries ensuring providing quality assurance and direction. The FarCry development road-map is available from the FarCry web site

Are there opportunities for my organization to influence future development of the system?

Absolutely! The FarCry code base is open source and supports a thriving development community. You can influence the code base by simply giving feedback on the product, bug reporting, contributing code and features of your own for inclusion or paying to fast-track functionality you require.