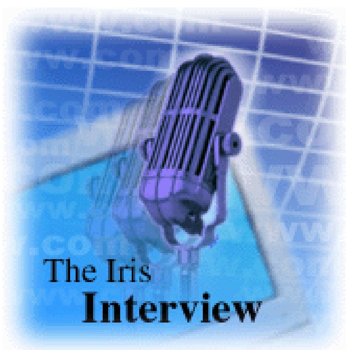

By Design: The Iris Template Team

Interview by
Jason
English

Level: Intermediate
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This month's Iris Interview is with four members of the Iris Template Team—Debbie Branco, Scott O'Keefe, Richard Watts, and Murray Hurvitz. They are part of team that is responsible for designing all of the database templates that are included with Notes, Domino, and Domino Designer. In this interview, they discuss what templates are, tell which ones they work on, describe details about how different templates work, and even reveal some ideas for future template features.

And for the month of September, 2000, you can post questions for the template team in the ***Developer Spotlight discussion forum****.*

Important Note: This interview discusses ideas for new features that are still being planned and worked on, and (at the time this interview was published) are not committed for any future release.

Debbie Branco

Debbie Branco has been working on Notes since 1988, first in the Lotus Notes Quality Assurance group testing and coding the templates, and has worked primarily on developing templates for Lotus and Iris since 1994. She transferred to Iris in 1997. She currently works on the templates for TeamRoom, Personal Journal, Bookmarks (which includes the Welcome Page), Subscriptions, and the Archive Log.

How long have you been working on your templates?
I've been working on TeamRoom for three years. Personal Journal I've owned for about a year. The Bookmark and Subscription templates I've owned for the past seven or eight months, since after R5 shipped. I'm responsible for those in the next Notes release. Archive Log I've owned for three years.

What is a template? What's the difference between a template and a database?
Actually a template is a database. The only difference is that when you create a database using a template, it provides you with the boilerplate for the Notes forms, views, agents, etc. Plus, it translates the ACL (Access Control List) to a database ACL. A template has a special ACL that automatically makes you the manager, for example. It will make the default of your database whatever is appropriate for that type of template. For example, the default of your Mail database is going to be "No Access." It was set that way in the template. The default of a Discussion database might be Author, and that was set in the template. So really, a template is a database, but it's used as the foundation for the databases that are created.

Debbie Branco

Describe the TeamRoom template for us.
Think of the TeamRoom as an enhanced Discussion database. It's really an offshoot of the Discussion database. A Discussion, on one hand, is just a simple database that has main documents and responses to those documents. A TeamRoom also has main documents and responses, but it's enhanced to include more structure and some workflow. It's more geared towards a team sharing and collaborating, as opposed to just anybody using a Discussion database. TeamRoom is for a particular team to keep track of its project.

So with a TeamRoom you define a TeamRoom setup, which gives you a very strict list of categories. In a Discussion you can put any category you want, it's kind of a free-for-all. In the TeamRoom, you define your category list for that project within the TeamRoom setup, and TeamRoom users are limited to only those categories you've defined.

Another thing I want to mention about TeamRoom is that it is fully compatible with the Discussion template. You can take any Discussion database starting with 4.0 all the way through 4.6 and you can replace the design of the database using the TeamRoom template, and you won't lose any data. You will have to create a TeamRoom setup and participants, as you would in a normal TeamRoom, but all your data will be preserved.

The creator of the TeamRoom database defines the TeamRoom setup?
Yes. In the TeamRoom we have different types of documents. The four default ones are "Action item," "Meeting," "Discussion," and "Reference." In a Discussion database they're all just free-for-all documents. With TeamRoom, you can make a Meeting document, or you can have an Action Item that you can assign to one or more of the participants. And that leads me to another part of TeamRoom, which is where you define the members of the team. You create team member profiles. You can create Milestone/Event documents that are appropriate for a project that you're working on. You can define sub-teams within a team. And all the documents can be assigned or re-assigned to team members and sub-teams that are defined within the TeamRoom. It's kind of a microcosm of a larger group. It's project-oriented.

How was the TeamRoom template developed?
It actually started back in the release 4.x time frame. An original TeamRoom was created by the Lotus Institute. For R5 it was decided that Iris was going to create one that was going to go in the Notes kit (the 4.x TeamRoom did not go into the Notes kit.) I was chartered to write a spec for the new TeamRoom template. So I looked at the 4.1 TeamRoom and wrote down all of the different features that it supported. From that, the product manager and I decided the features I was going to put into the TeamRoom to be shipped with Notes. I didn't start with the field names. I didn't start by taking that

template and modifying it. I started fresh. I used the *concepts* from the old TeamRoom, but I built a brand new TeamRoom. I used the R5 features that we had available to us—framesets and outlines, Java applets that worked on the Web, etc. From there I collected ideas from product management and other TeamRoom users as to what features they'd like to see in the template.

So the TeamRoom that shipped in R5 was significantly different from the original that shipped on its own?
Yes.

Does that original still exist?
It's still available on the Web somewhere. People still ask for it in the Notes.net Gold Release Forum. *[Editor's Note: You can download TeamRoom 4.1 from* ***Lotus.com****]* One complaint that people have had with the 4.1 TeamRoom is it's not Y2K compliant. I'm not sure if the 4.1 version was officially tested. The 5.0 template *was* tested and is Y2K compliant.

Since the 5.0 release, has the TeamRoom template evolved with the point releases?
It has. As a matter of fact I heard about people that were using the 4.1 TeamRoom and wanted to use the 5.0 TeamRoom—the two are not compatible with each other. You can't just replace the design of a 4.1 TeamRoom and have it work with the 5.0 design. So I wrote a migration utility that people can run if they do want to convert from 4.x to 5.0. If they replace the design using the 5.0.3 TeamRoom, they'll get that utility as an agent, and when they run that agent it automatically converts all of the documents into the 5.0 format. For example, the 4.0 TeamRoom has six or seven different documents that make up the TeamRoom setup. The 5.0 TeamRoom has just one document. So this utility takes those six or seven documents and merges them into this one TeamRoom setup.

When did that migration utility become available?
In QMR 5.0.3. *[Editor's note: You can also download the utility from the* ***Iris Sandbox****.]*

What are you thinking about for future versions of TeamRoom?
I'm looking at bringing back the preview pane in the Notes client version. People really wanted to be able to use the preview pane, both in the Discussion and in the TeamRoom.

I'm also planning a much easier way to add and remove team members from sub-teams. I'm working on a utility for updating the Access Control List. And I'm working on adding announcements to the TeamRoom.

Okay, now let's talk about the Bookmarks/Welcome Page template. What do you have in the works for the future?
We want to give the user many more frame choices. I think in the 5.0 Bookmark template you had five or six frame choices. That will probably more than double.

You should also have the option, when you're in Calendar and Inbox and To Do, to be able to get your simple action buttons and create a new memo or to create a new Calendar entry, for example. And we're working on allowing you to display more things within the frames than you used to. So, a lot of cool things should be coming.

Tell us about the Subscriptions template.
Any database that's on a R5 server can have Subscriptions. You can create Subscriptions for it. In the subscription form, you can choose "Notify me when a particular author has created a document," or "Notify me when a particular string is within the subject of the document," or "Notify me when a document of a particular size (in kilobytes) is available."

We're thinking about allowing you to monitor fields within the database. So you'll get a button where you can show a list of all the fields within the database that you're trying to monitor and you can say, "Has any of these words," or "Has all of these words," or " Has none of these words."

Once you save the Subscription, a process automatically occurs on the Notes client that runs periodically and updates your Subscriptions database (every Notes client from 5.0 on has a Subscription database whether you use it or not.) It will automatically put links to those documents that you requested in your Subscriptions database. Then you do have the option of displaying your list of Subscriptions in your Welcome page. That's how they tie together, but really they're separate.

So, there's the Subscriptions template that's sitting there, and that's called Headline.ntf. And you create a Subscription database?
You don't create it, it gets created automatically for you, in the same way that your Bookmark.nsf, or your Welcome Page gets created.

At install?
At setup. As soon as you load the Notes client and go through setup, that is when the databases are created.

But Journal and TeamRoom are templates that you have to create manually?
Correct.

Let's say I want to make a Subscription to a database. I would go in and open up Headline.ntf and...
No, Headline.nsf is created automatically for you as soon as you launch the Notes client. So in order to create a Subscription, you open the R5 database you're interested in, whether it's a bug database, or a discussion database, or a TeamRoom database – you open the database, then you go to the Create menu and you do Create - Subscription, and a Subscription document will appear that you can fill in with your needs.

And when I want to see my Headlines, which basically is a display of my Subscription information, it would either be on my Welcome Page where I set it, or can I open that?
By default you can find it under "Favorite Bookmarks." Or you can also display it on your Welcome Page. Or you do File - Database - Open and open Headline.nsf. The most common two ways of doing it would be to open it through the Favorite Bookmarks, or to put it on the Welcome Page.

[Editor's Note: For more information on Subscriptions, read our Iris Today *article* ***This Just In! Understanding database subscriptions****.]*

Tell us about the Archive Log.
The Archive Log is a repository of links to the documents that were archived from one database to another. Every time you archive in R5, there are two databases involved—the source database, and the archive database (where the source documents are placed). The Archive Log is somewhere in the middle. The Archive process removes a document from a source database (if that's what you asked it to do), places the document into the Archive database, and updates the Archive Log with links to the documents that were archived. The Archive Log doesn't just show doclinks, it gives you data on the name and location of the source database, and the name and location of the Archive database.

Is the Archive Log is something you create manually?
No, Archive Log is created automatically whenever you setup a database for archiving. You do that through File - Database - Properties. That's the point

the database is created, when the archiving takes place.

[Editor's Note: For more information on archiving, read our Iris Today *article* ***Helping keep e-mail pack rats under control (Part 1)****]*

How does the template team work within Iris development?
The main development groups that I work with are the Editor and Designer groups. And some of us who work on templates that are Web-enabled also work with the Web server team. We're big users of the their features before the Notes product is actually shipped. We're trying to code our templates at the same time they're coding the features that we need to use. So we find a lot of bugs in that respect.

You're probably their best test audience.
Possibly, although we have an excellent QE [Quality Engineering] group. We're a good test audience early on in the development cycle. Also, we work with the UI [user interface] designers who want to give a new look and feel to our templates. So we work with the UI designers on one side of us and the core feature developers on the other side.

Is that how new features come about? What are some of the sources for change?
One of the sources would be the UI designers. And that's mostly the look and feel of the template. Another very valuable source are the product managers, who are responsible for the different templates.

I monitor the **Notes.net Notes/Domino Gold Release forum** a lot, and that's where I get some ideas for my templates as well. I got some ideas for TeamRoom that way, especially the migration utility. I saw the need for it on there. We don't want to make the Journal too complex, it's a very simple template. But I would definitely take into consideration requests that I see on the Notes.net forum, and also the Lotus Business Partners forum.

The features for Archive Log are governed by the archive process. So I work with the developer who codes for archiving. She tells me what new features are coming, and then I have to decide how to portray those in the Archive Log.

[For the Document Library] one thing I added—actually, it was in 4.6 and in 5.0—we didn't have any parallel document review cycle for the Web, so that was the new feature that was added in 4.6 and 5.0. But when we added that feature, that made the template incompatible with the 4.0 Document Library because that wasn't Web-enabled and it didn't support parallel processing at all. So I had to create another migration utility to upgrade the documents from the 4.0 Document Library to the 4.6 or 5.0 template.

Do you encourage developers to manipulate templates to come up with their own designs?
Oh sure, by all means. All of the templates are there as boilerplates, as starting points for people to create their databases. But absolutely, people should modify things to their needs. Maybe not as much the system templates, like the Name and Address book. You can modify them a little bit, but the field names are set in stone in many, many cases. So I wouldn't necessarily recommend doing anything to the Name and Address Book that would potentially break a server or client. But certainly the TeamRoom and Discussion and Document Library and Journal. They definitely lend themselves to being updated by people that have more ideas that they want to explore.

What's a good way for developers to give you feedback?
The Notes.net Notes/Domino Gold Release forum. Every day in the forum I search for TeamRoom. And I try to answer the questions they have pertaining

to TeamRoom as well. I search for Welcome Page and read things in there as well.

*[Editor's Note: For the month of September, 2000, you can join Debbie and rest of the template team in the **Notes.net Developer Spotlight forum**.]*

Scott O'Keefe

Scott O'Keefe has been working at Iris since October, 1999. He's been part of the template team since he started, working on Administrator client templates. He currently works on Admin4, Setup, SetupWeb, Cluster, Events, Log, and Statistics and Reporting.

Scott, we're asking each member of the team their definition of a template.
A template is a database. But it's really more of a cookie-cutter. They're generally blank, but we do have some that include content, like the Events database template ships with 3000 documents in it.

Setup and SetupWeb are really databases. They both have an .nsf extension. When you fire off the server the first time it basically shuts itself down, then loads the client that starts this database. Then it's kind of like a wizard, where you're going through, setting up your Domino server. So you say, "I want to have HTTP running, I want to have newsgroup support, I want to have DECS (Domino Enterprise Connection System)." It's like a wizard. It walks administrators through the setup with different pages.

It's interesting that many databases seem like separate applications, but the administration databases appear to be part of the Domino Administrator user interface.
Right. It looks like it's one thing, but really it's six or so databases. Because you're clicking on buttons and moving around, it looks like they're one. But really you're moving from one database to another.

How is each database created from its template?
The first time you run the server the Setup database loads, so you can pick and choose how you want your server to behave. When you close out of that you have to re-launch the server, and it runs in console mode where you don't see any graphic UI. That's when all these databases [Admin4, Events4, Log and Statistics and Reporting] get created for the first time. The Cluster database gets created automatically when you create a cluster.

Scott O'Keefe

How do you work with the rest of Iris development?
I work with different groups in the Administrator Client team. I meet with a lot of people one-on-one for different features that they need to implement. They

say, "I have this feature, can you help me out?" They'll mock up something, then they'll say, "This is how it should work, and here's a rough idea of how it should look." And they have specific fields that they need so that their code will function properly. We need to give them a Notes interface to work with. For example, for release 5.0.5, I worked on WebSphere encryption. I didn't do any of the backend coding. But they said "Here, we need this form and we need it to behave this way." So that's when I get involved.

So you're a designer more than a programmer?
Well, I don't do C or C++ programming. I do use LotusScript and formula language. Something that's going to ship with the product, that everyone has access to. So if something specific is supposed to happen when a form is saved, then that's where we would write the LotusScript for a "querysave event" and have it actually fire off an agent or do whatever.

Could you talk more about each of the templates you work on? How are they going to develop in the future?
A lot of the work for Admin4 that's coming up is making it do a lot of behind-the-scenes processing. There will be views that can be scanned for events that you are waiting on. For example, if you move a person's mail file from one server to another, that doesn't happen instantaneously. The AdminP process runs at some given interval, and it actually does the work or moving the mail file from one server to another. And it will update any documents that need to be updated (though not ACLs).

Also in the Admin4 database, there are some things that require administrator approval. In the current configuration you actually have to go in and open each document to see the approve or deny buttons that will allow you to let the action complete or disregard it. One of the things that we're working on is being able to select multiple actions from a view, and just hit one button and have it process all of them, rather than having to go in and open up each individual one. It's very time-consuming if you've got 2000 documents.

The Cluster Directory database is used for server clusters. When you create a cluster from the Admin client, that's when that database would be created. It's just a way of managing which servers are clustered and which aren't, and which databases are on those clusters, for fail-over. I'm working on a whole UI overhaul. One of the things that was requested for those is that the views have a more graphical representation of which databases are clustered and which are due to be obsolete. So there will be a more graphical look in the views for that in the future.

The documents that ship in the Events database are all the statistical thresholds. But people can go in and create their own. We just added one for "total pending mail," for when the router goes down and the information is not being pushed out anywhere. People can't figure out how much mail is waiting. So, those are the types of things that live in there. And people would actually create their own statistics for their own probe so they can go out looking for things.

So you'd encourage people to tweak the Events database for their own purposes?
I'm not necessarily suggesting that they change the design, but that they add their own statistic, event, and probe documents. We give them a set, and then they can go out and create their own events to monitor. They can configure their own environment so that they get notified when things that are important to them happen.

The idea of administrators manipulating the templates—it doesn't seem like people should change the design of the administration templates at all.
Right. We've given them a vehicle where they can just create their own documents that are going to allow them to perform their jobs in a way that's

more specific to them. It's not like Mail. Everybody wants to change Mail, everybody wants to touch the Discussion database to tweak things and have it behave the way they want it to. The administration templates are really system-driven templates. I'm sure there are people who are changing them, but I haven't talked to them. It's not nearly as sexy as changing something that everybody's going to see. Changes in here are important, but only a handful of people would probably see them.

What are the various outlets that people have for feedback?
We really do visit and read the Iris Cafe here on Notes.net. Change also comes from different business partners that people talk to and from Lotusphere. The big thing to know here is that customer feedback does matter. Things really do happen because of it. People aren't just shaking your hand and walking away. It comes back here and meetings get held. Obviously you can't make every change, but it's a big part of it.

At Lotusphere we have a developer's lab, and at DevCon the same thing. At Lotusphere, it was open from 8 AM to 5 PM and people were just streaming through there, constantly asking all kinds of questions for server or client.

There is a lot of good feedback from Lotusphere?
It is a good place for me to go to find out how much I don't know. It's amazing, people come in and they say, "Could you just make it do this?" And I just stand there and think, "I would never in a million years have even thought to try and make it do that." So it's pretty eye-opening.

Richard Watts

Richard Watts came to work for Iris in November, 1999, after working at Lotus for three years as an application developer. He currently works on the Mail, Rooms and Resources, and Local Free Time Info (Busytime) templates.

What is the Mail template and how does it fit into Notes?
Unlike some of the other templates, the Mail template is an integral part of the product. It is heavily tied to the client. It is the thing that you use to read your mail, book your events, basically do any sort of office automation processing. Other templates are more of a conscious decision than Mail. If you have a Notes ID or a Notes client, generally speaking you will have some sort of Mail database to get stuff. It's kind of that foundation which allows all of the neat things that go on in Notes to happen. So you can do things like create complex workflow and document approval processes, because there's this underlying assumption that you have a Mail database.

So it's pretty fundamental to Notes.
The Mail template is a key piece of the Notes architecture. More specifically, a repository for messages; typically it is your Mail database.

When you talk about the Mail template, you're talking about the Inbox, where you're actually reading and getting Mail. But you're also talking about Calendar and To Do? So, three different views?
You could call them feature areas. Technically they are framesets. So there are three separate framesets, and the reason we did that was because there was too much to put in a single frameset. We broke it into three rough sections. But there is overlap among them. Invitations that are sent to you go into your Inbox, group to do's can go into your Inbox, you can show to do's in your calendar. There's this grey area between them, but they're all very tightly integrated. But they are separated by functional area.

Richard Watts

How has the Mail template developed since you first started working on it?
Well, in 5.0.3 we did a lot of enhancements and bug fixes to the Mail template.

Can you talk about some of the major ones?
The ability to reschedule a meeting automatically when changing a location or changing the room was a big one. That is, when editing a sent meeting and changing either the room or location causes a reschedule update to be sent to all attendees. The system now does that for you. There were fixes to addressing. RFC 822 name support went into Mail, that was another sizeable amount of work. And there were several improvements to Webmail. Another feature that we changed in 5.0.3 was Copy Into. We now drive the type of calendar entry we copy into from your calendar preference so you can specify the default meeting type we populate.

Can you give us a preview of what might be coming in future releases of the Mail template?
I think from the calendar and scheduling and mail standpoint, you're going to see continued improvements in the UI. It's an iterative process, and as we get feedback on what works and what doesn't we're trying to refine the UI to make it easier to use. Better management of Calendar and Scheduling information and support for Internet C&S protocols.

Where do you get feedback from?
All over. We get feedback from Notes.net, from the various conferences, like DevCon and Lotusphere. We get feedback from feature set product managers who interact more with the customers. We get enhancement requests from business partner forums and the Notes/Domino Gold Release Forum. There are feedback forums and usability testing all the time on various parts of the product. We focus on a certain area for a period of time and try to figure out what we're doing right and what we're doing wrong, and try and come up with ways of fixing it.

How do you and the team work within the Iris development team?
We are the hybrid consumers of what they produce. In some cases, we are the driving factor in a new feature, in others, there is a plan to use what they produce. In other cases it's more interactive. A feature is a rough idea and template developers are closely involved with the development process to ensure that the feature is usable from a development standpoint.

When you say use what they produce, do you mean the Designer client?
That is one example. Or a particular feature. A particular feature might be developed in the Notes client or the Designer or the Administrator client that

we utilize within a template. Or it could be a design element, it could be a field, a new @function, a new LotusScript property of method—it surfaces in many different ways. Then there are other cases where there's more of a two-way process, where we have specific needs that we think should be in product.

Can you give us a specific example?
There have been changes to agents that we requested. We had a situation where we need some way to allow people with Editor access to a template, to be able to do things that generally only a Designer or Manager could do, like delegate to allow other people to read their mail. You can set up a scenario where a person is the Editor of their mail file, but they can't delete it, they can't make massive modifications to it, they can just do their mail stuff. We had limitations based around Notes security that certain features aren't available to those types of user. Long-term, the way to change those limitations will be to create methods and agents to run agents by proxy, or run agents on behalf of another user. Those are the types of things that we've asked for.

Is there a general movement toward standardization?
There's a general movement toward an open and robust feature set that meets the standards that are evolving in the industry. It's a challenge, because those standards evolve, and they're still in this state of flux, and it's kind of hard to figure out which ones will be alive and be adopted, and which ones will not.

So you have to sort of pick and choose what you're going to support?
Well, short-term we have to try to weigh the feature set with the work, with the popularity and what it's going to take us, development-wise, to implement that feature. So, it's a hard call.

There are certain databases, like TeamRoom and Journal, that designers are encouraged to alter. Is the Mail template one of them?
As a developer at heart I think that one of the neatest things about Notes is that the templates are open and you can alter them, unlike other mail products. The problem comes in where you alter and still assume you can get support. Because we don't always know how to figure out what you changed versus what we've changed. It's tough to support an altered template, and that's where the question comes up.

Can you think of any interesting ways the template has been tweaked?
Well, I can think of some tweaks, but they're not necessarily tweaks that I would recommend. I've encountered some tweaks that are complete rewrites of script libraries, where people have commented on things that they either didn't understand or couldn't get to work the way they wanted after they rewrote the script library, which had done away with features. That's up to them I guess, and they're more than welcome to do that, but they have to understand that by doing that they're doing away with features.

That's one of the traps. We encourage you to do what you need to do, make your own template if that's what you want to do, but we may not be able to test our templates in your environments necessarily. It is very difficult to create a balanced mail template that answers every request. We try to compile all of those requests and play the balancing game among performance, new features, and old behavior. It can be a very tough balancing act.

I encourage people, if you're going to do modifications, especially in the Mail template, to learn something about object-oriented programming and deriving classes. Not modifying existing classes, but deriving a class and overloading a function for creating new methods that call the old methods to get your behavior.

So adding on top, instead of re-writing or altering?
Right, because there's a better chance of not introducing problems if you call existing functions and then make your modifications. The other side of it is, it allows you an easy way to upgrade. You just have to replace the script libraries that you overloaded, that you're deriving from. It should be less work to integrate, unless you're radically modifying all the stuff that the classes were once modifying. So that's a recommendation that I'd make, strongly. I think you would find a lot less pain if you did that.

Murray Hurvitz

Murray Hurvitz has worked at Lotus since 1993, moving to Iris in 1995. He is one of the founders of Notes.net (he previously worked as an application developer and a system administrator for the site), and he has been working on the Webmail template since November, 1999.

Webmail is part of the regular mail template?
The mail 5.0 template actually has two personalities, it has a Notes side and a Webmail side. They're integrated. But I work on the Webmail piece. Previous to 5.0, in 4.6, we actually had a mail combo template you had to install. In 5.0 we decided to get rid of the combo and put it all in one database.

[Editor's Note: In release 5.0.4, Lotus introduced an extended mail template (mail50ex.ntf). In release 5.0.5, the extended mail template provides support for iNotes Access for Outlook plus the ability to use Webmail offline using DOLS.]

When you say a "combo" where does the separation come in?
There were actually two database offerings. There was the strictly mail, Notes template. And the combo offered a Webmail and Notes mail combination. Now we're really only essentially offering the combo. But we've made it better in 5.0, thanks to a lot of the improvements in architecture, we don't have to make a lot of compromises.

Murray Hurvitz

Can you talk about the original idea behind Webmail? Why have a Webmail client? And how has it evolved in the time you've been working on it?
Webmail client is a great way to roam anywhere you want and not have to take anything with you. Technically, our Webmail client allows you to go up to any kiosk, or workstation anywhere and access your Notes mail with a browser. So there's a great freedom in that. Also, it offers you an ability to, if you so desire, not to have a Notes client on your laptop or workstation for whatever reason, you can still access Notes mail. You don't get full Notes functionality, but can still read your mail, participate in calendaring and

scheduling, use your to do's, things of that sort. So it is a nice tool for those who either want to not install or put a Notes client on every workstation, or you have space constraints and you don't want the Notes client on, say, a laptop with a smaller drive.

How has it evolved?
The major changes from 4.6 to R5 were the addition of applets to try to provide better usability—the view applet, the action bar applet, and the outline and editor applets.

These were attempts to make it more like the Notes client?
Absolutely. In addition to that there was all the calendaring and scheduling in 5.0. A lot of functionality was enhanced. We tried to bring people almost all the way to a Notes client. We can't do it 100 percent, but we tried bringing them almost the full functionality of the Notes client on the Web in 5.0. Currently, since I've taken hold of it, we've made some changes. For example, we actually took the applets out! Our applets I think are really well written, and are excellent applets, but to a certain degree a lot of customers who were working with slow connections didn't like applets. So what we did was we took out the view applet, the outline applet, and we made the editor applet optional. So the gain on this particular functionality is that we have a lighter, faster Webmail. But at the same time we still try to maintain some usability gains that we got out of the applets.

How did you do this?
In the Outline applet we used some DHTML and some style-sheet technology to allow us to get a nice applet style. The applet was [originally] added to the Outline to highlight—that's the only reason it was there, to highlight if you selected something. So we thought we could do that through other means.

So these other means, like DHTML, weren't available when you started putting applets in there?
There wasn't a proliferation of browsers that could support the technology. But now IE5 is very common, and with Netscape 6 hopefully around the corner, more people will be able to take advantage of these types of functionality. So we thought it was time to use them.

The Webmail enhancements will be in QMR 5.0.5?
Right, this will be available in 5.0.5.

And these are only available using IE5?
Right. I mean, it is backward compatible, you can still use it with older browsers, you just won't get some of the niceties. We felt that trade-off was worth it, given the gains going forward.

What about future releases of Webmail?
We're going to continue to migrate some of the gains we've got in 5.0.5, but in addition to that we're going to continue to enhance Webmail. We'll continue to use technologies like DHTML, the layering functionality in those technologies. We're going to try and take advantage of some of the new features.

How do you work, as a template developer, within the rest of Iris development?
Well there is a template team. I work within that group. But the template team is unique at Iris, because we effect almost everyone. Everything that happens in the Notes environment happens to a template. The nice thing about the template team is one day I'm working with the developer who does the action bar applet, talking to a developer about e-mail, and how our Notes native mail works. Or I'm upstairs in the server group talking to someone in programmability. I'm all over the place. So, I work tightly with the individual team members who work on the mail template. But because the mail

template has so many interdependencies, I'm also everywhere at Iris. Iris is getting bigger, but it's still nice to be able to walk around and grab people when you can.

What is your source for feedback and ideas for new features?
I went to DevCon and got a lot of nice suggestions there. Lotusphere is also extremely important. It is an important forum; we get a lot of feedback from that. We have a lot of feedback on Notes.net. That's probably one of the best places to get feedback because it's not just an intermittent thing—I mean people are out there all the time. There are a lot of hard-core users out there. We gather from just about all avenues.

Do you have anything you'd like to tell designers out there?
I want to encourage them to use the template and give us feedback on it.

ABOUT THE AUTHOR
Jason English graduated from Northeastern University with a BA in Journalism and now has only a hazy idea of how he wound up in software. He is currently a user assistance writer at Lotus, working on Notes help and internal documentation for a variety of projects. He previously worked as a journalist at several Massachusetts newspapers, and as a technical writer at several companies, including Pegasystems in Cambridge. He lives in lower Allston (L.A. to the initiated) and enjoys skiing, guitar, baseball, and, is, um, looking for a soul mate who enjoys long walks on the beach, Russian poetry, and the films of Eisenstein (just kidding, no calls please).