



gamedeveloper

THE LEADING GAME INDUSTRY MAGAZINE

[SKUNK WORKS]

OUR RATING SYSTEM : EXCEPTIONAL GREAT FAIR POOR UNFORTUNATE

DEVTRACK 6.0



STATS

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PRICE

DevTrack Standard Edition: \$2,000 server fee. User licenses begin at \$500 per user.

SYSTEM REQUIREMENTS

Windows Client: Windows 95/98/NT/XP; PC with 128MB memory and 200MB free disk space. Web Client: Internet Explorer 5 or above, Netscape 6.0 or above, Firefox 1.0. Server: PC with 256MB memory and 500MB free disk space; Windows NT or Server; Microsoft Internet Information Server 4.0 or above. Supported Databases: Microsoft SQL Server; Oracle; MySQL; Microsoft Access; other ODBC compliant databases.

PROS

1. Scalable.
2. Easily set up and managed through GUI interface.
3. No programming required.

CONS

1. Server programs and native client for Windows only.
2. Some interfaces just a bit awkward.
3. No ability to program directly.

DEVTRACK 6.0

Dennis Crowley

AS A PROGRAMMER, IT'S AS HARD TO BE excited about bug databases as it is about source control ... or your text editor. Bug-and issue-tracking just isn't sexy.

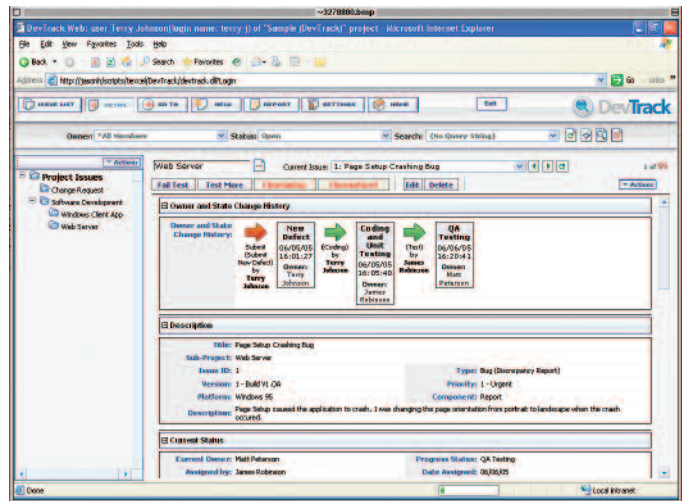
However, game developers, not to mention software developers, simply must have a solution for handling these problems. If you are a development team of one, you may be able to survive with sticky notes, or better, a text editor. As your team gets a little larger, maybe email and spreadsheets will suffice. Of course, for any serious project, you cannot afford to mess around with a rickety network of ad hoc solutions. Most of us need a bug database.

SERVER SIDE

DevTrack is a database-driven, multi-tiered, issue-tracking application. You can translate "issue" here to mean "bug," but the software is not limited to just tracking bugs. The tool from California-based TechExcel virtually eliminates the need for database programming when creating a bug database. The project's setup and administration is GUI-based (making the job slightly more intuitive for non-programmers), while DevTrack handles the database back end (since the tool contains no database itself).

As a multi-tiered application, DevTrack 6 is actually a suite of clients and servers, and as such is scalable. You can set up all of the server programs on one machine, or distribute them across a network for a larger organization, so the solution can grow (or shrink, I suppose) as a team's needs change.

Larger studios that manage many



TechExcel's DevTrack 6 is well suited for project managers due to its graphical interface.

projects will also benefit from the standardization that comes from using only one issue-tracking solution across all its titles.

WINDOWS ONLY

DevTrack is pretty much a Windows-only solution. The servers are Windows-only, as is the native client. The web client can be used on any platform that supports a browser, so if you have some artists using Macs, or developers working on Linux, they don't have to have a Windows machine running to use DevTrack. However, if your organization has decided for whatever reason, be it performance, financial, or ideological, to use something other than Microsoft Windows for your

servers, DevTrack will not work for you.

On the other hand, your database does not have to be running on Windows, although TechExcel recommends that you use Microsoft SQL Server for ease of database configuration, tuning, and administration. Support does exist for mySQL and Oracle, but administrators must run some setup scripts outside DevTrack in order to use them. These scripts are run once during project setup. Microsoft Access is also supported, but TechExcel does not recommend that developers use it for any substantial project.

WHOSE PROJECT?

While DevTrack 6 doesn't require programming brains to set up projects,

BOOK REVIEW



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TITLE

3D Game Textures: Create Professional Game Art Using Photoshop

AUTHOR

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Focal Press (Elsevier)
30 Corporate Dr.
Suite 400
Burlington, MA 01803
781-221-2212
www.focalpress.com

it still takes a lot of know-how to do it properly. The administrator must manage access and issue-forwarding privileges, set up the issue states and workflow, create GUI forms where necessary, and click and unclick myriad check boxes. There's a lot to learn here, but once mastered, DevTrack offers the administrator a lot of power and flexibility.

Speaking of administrators, the approach DevTrack takes most certainly makes the title "project administrator" more suitable to project managers than programmers, which is a very good thing. As a programmer I was almost longing for a Perl script (I said almost).

WORKFLOW, NOTIFICATION, ESCALATION

One of the nicer features in DevTrack 6 is the visual workflow tool. The workflow defines what various states an issue can be in and what can be done next. A workflow is represented by a directed graph, with the nodes (boxes) representing what state the issue is in and the edges (arrows) representing the possible next states for the issue.

The administrator can lay out the workflow visually and then select the individual graph nodes or edges to set up rules for that state or transition.

New to version 6 is the notion of transition-based workflow. By selecting an edge in the workflow, you can create rules and a custom form for advancing the issue between the connected states. This form shows up as an action tab when viewing the issue from the user's perspective in the client, so all the possible next steps for the issue are immediately apparent and accessible.

In my opinion, the transition-based workflow feature makes good intuitive sense and is a big step forward over version 5. Additionally, the new version supports multiple workflows in one project, which lets the user create different workflows for different kinds of issues.

Another solid feature is support for issue notification. Issue notification, as the name implies, is used to send messages, such as emails, to all appropriate users when issues are created or change. New to version 6 is the ability for developers to "subscribe" to issues for notification. By doing so, a developer is notified when any change is made to an issue included in his or her personal subscription list. The administrator is free to either require these notifications or allow users to opt in or out through subscription rules.

What happens when an issue sits idle, you wonder? DevTrack 6 also has an issue escalation, which can be set up to nag users or tattle on them to managers (again, via a specified notification method like email) when no action has been taken on an issue for certain period of time, as defined by the administrator.

CLIENTSIDE

On the client side, individual users have two choices. There is a Windows-only native client application and a web-based client, which should work if you've upgraded your web browser any time in the last six years or so.

Your first view of an open project is the main view. The configuration is immediately very familiar, with a tree controller on the left, a list of issues on the right, and a toolbar at the top. The tree shows the sub-projects defined by the administrator for the current project. When you click on a sub-project, every issue in that branch of the tree is displayed on the right, filtered by the query in the toolbar. If you click on the root of the tree, every matching issue is displayed. This is all pretty straightforward and easy.

The information presented when viewing an issue is a bit more complex. There are various "issue detail" property pages or sections that may be visible, depending on how the project manager has set up the project and how the user has customized his or her client. Some of the various items available are Description, Current Status, Tracking History, and Owner and State Change History, all fairly standard features of most bug-tracking software systems.

Attaching documents to an issue is pretty easy; you add a note, and then browse for the attachment. A screen shot utility has also been provided that simplifies screen captures by automatically opening the screen image and providing some basic tools for annotating and marking up the image. There is no need to open an application (such as Photoshop or Paint) to paste your captured image into. This is a minor addition, but is a good indication that DevTrack is interested in efficient workflow.

Invisible to the user, the documents are handled by a separate server program, which can be moved to its own machine if the load gets too heavy.

DevTrack provides several options for adding text annotations to an issue: description, work description, forwarding notes, notes, and attachments, although some of these functions were a bit

confusing at first. For example, should I have the "attach forwarding note to work description" box checked? Should my comment be called a "description," "work description," or "forwarding note?" If handled improperly, all of this flexibility could sacrifice clarity.

The Owner and State Change History panel tracks the issue's transitions in the workflow. While this information is clearly useful, the graphical display is a bit bulky and unnecessary in my opinion. An issue that gets batted around a fair bit might be better displayed in a log style.

All else aside, it didn't take very long to get used to using the client, and before long I had taken several entertaining fake issues through the workflow graph and out the other side.

FITTING DEVTRACK INTO PRODUCTION

The folks at TechExcel actually have other "application lifecycle management" packages that can be integrated with DevTrack, such as DevPlan for project planning and tracking, and DevTest for managing and executing your test plan. If you're looking to add other solutions such as these, DevTrack should be on your list of tools to evaluate, since you'll benefit from the easy integration between TechExcel's suite of solutions.

DevTrack 6 offers integration with some source control systems, such as Perforce, Microsoft Visual SourceSafe, ClearCase, PVCS, and CVS. Depending on which solution you have, you may not need the DevTrack client open to perform many operations. Based on a preliminary look into this feature, integration with Perforce seems the most comprehensive.

In DevTrack 6, there's really more for a product manager to love than a programmer, artist, or other game developer. But everyone should know that accountability and good systems for managing and enforcing accountability make for higher-quality products.

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