SZSN Acquires Control Of Aerospace Agriculture!

Shandong Zhouyuan Seed and Nursery Co., Ltd (SZSN)
$0.43 UP 79% in a Week!

SZSN announced its further expansion by acquiring 53.47% of Aerospace Agriculture Technology Ltd. This will further expand is distribution and R&D capacities. Get on SZSN Friday!

Java technology has a platform-neutral model that runs on multiple platforms.
However, a worker thread can produce and publish intermediate chunks of data to o.
SwingWorker invokes the done method on the EDT, so you can safely interact with any GUI components from within this method.
Sun has customers in the financial services industry that depend on Java technol ogy to run their applications.
The retrieveImage method and its EDT no longer need access to the worker threa d.
RunnableFuture interface.
In the preceding example code, the ImageRetriever class calls its setProgress method as it receives update information from the ImageIO API.
This event handler then calls the retrieveImage method.
To show that it will also publish each individual, intermediate matching image from the list, it also uses the ImageInfo type in the class type parameters.
This represents an opportunity to show off other SwingWorker features: the pub lish and process methods.
Once the GUI starts for most event-driven desktop applications, the initial thr ead's work is done.
During that time, if the application performs the web service interactions on t he EDT, the user will not be able to cancel the search or interact with the GUI.

The SwingWorker class helps create a responsive image search application.
The retrieveAndProcessThumbnails method uses the parsed list to download the th umbnail images.
However, with just a little more effort, you can extract more work from a Swin gWorker subclass.
ImageRetriever needs the URL to retrieve an image.
You will find more detail about these methods later in this article.
The ImageSearcher class is responsible for searching and retrieving thumbnail i mages for the UI's list.
Here are two common ways to call this method: SwingUtilities.
Again, this example uses the ImageInfo type.
How are you going to get the real problem resolved?
A SwingWorker thread updates both the progress bar and the label image.
Anything that might interfere with or delay UI event handling should exist in a worker thread.
Read the Help file after you have done the installation for a quick introduction .
First, you instantiate it, and then you call its execute method.
You may need a JVM expert from Sun and a database expert from Oracle.
However, a worker thread can produce and publish intermediate chunks of data to o.
Send us your story, and share it with your fellow developers.
Instead of executing the tasks on the EDT, the application uses the SwingWorker class to perform the tasks as worker threads.
Like all insurance policies, you hope you never need it, but when you do, you're e glad you have it.
However, providing the information in the constructor helps your application t o be more thread-safe because that information will not be shared among ImageRe triever instances.
The Premium plan covers this.
The ImageRetriever subclass demonstrates a simple implementation of the SwingWo rker class.
This represents an opportunity to show off other SwingWorker features: the pub lish and process methods.

If high-thread CPU consumption is not an expected behavior, the thread may be l ooping.
I was pretty happy with some aspects of it but the performance was terrible, mos tly because of my dodgy programming skills.
It also provides progress information to a listener that updates a progress ba r in the MainFrame class.
The application has two progress bars, one that tracks the search for and retri eval of the thumbnail image and another that tracks the download of a larger im age.
For example, plug-in JTop is a huge improvement, and the new HotSpot diagnostic MBean, which allows you to dump memory, stack traces, and configure VM options o n the fly, has proved quite handy.
For simplicity, this demo always asks for the first page of matching results.
Make the icons semi-transparent and drag the map around, the image is still smoo th!
The ImageRetriever subclass demonstrates a simple implementation of the SwingWo rker class.
It uses that information to set its own progress property.
For example, as the ImageSearcher subclass retrieves a list of thumbnail image s from a Flickr web service, it could display the individual thumbnail images a s they become available.
I was pretty happy with some aspects of it but the performance was terrible, mos tly because of my dodgy programming skills.
The following code shows how this class updates its progress as it downloads an image using an IIOReadProgressListener instance to track the work of an Image Reader object: reader.
PremiumPLUS SupportSuppose we’ve identified and isolated a problem in a JVM.
It uses that information to set its own progress property.
Implementing a Simple ImageRetriever When you click on a thumbnail in the list , an event handler creates an ImageRetriever instance and executes it.
The Premium plan covers this.
JTop sorts threads by the amount of CPU usage, allowing you to easily detect a thread that is using inordinate amounts of CPU time.
Solaris, Linux, and Windows each have different sets of debugging tools at the O S level.
This class is similar to ImageRetriever because it updates a progress bar and p rovides image data.
One of those events is a progress event.
Another way to put tasks on the EDT is to use the SwingUtilities.
You will find detailed descriptions of these methods later in this article.
Make the icons semi-transparent and drag the map around, the image is still smoo th!
ImageRetriever needs the URL to retrieve an image.
RunnableFuture interface.
The RunnableFuture interface is really nothing more than a wrapper for two separ ate interfaces: Runnable and Future.
The point of UI creation, the point at which your application basically hands c ontrol over to your UI, is often the source of your application’s first problem interacting with the EDT.
The V type indicates that an implementation’s publish and process methods will operate on values of type V.
One of those events is a progress event.
It enables you to examine the behavior of user programs as well as the behavior of the operating system.
The application has two SwingWorker subclasses: ImageSearcher and ImageRetriev er.
The retrieveAndProcessThumbnails method uses the parsed list to download the th umbnail images.
The Runnable interface defines a task that can be executed as a thread Use the invokeLater method to correctly instantiate your application UI from the initi

al thread.
You don’t have to know much more about either creating or using a simple worker thread.
In the Solaris OS, the DBX debugger program looks at the Solaris structure.
You can modify the application to download more or fewer images.
DTrace is a comprehensive dynamic tracing facility that is built into the Solaris OS.
The SwingWorker class helps create a responsive image search application.
The application has two SwingWorker subclasses: ImageSearcher and ImageRetriever.
Sun has customers in the financial services industry that depend on Java technology to run their applications.
You can use the publish method to deliver intermediate results of your processing.
You write once and run on multiple platforms, and you don’t have to embed anything specific to the platform.
For example, as the ImageSearcher subclass retrieves a list of thumbnail images from a Flickr web service, it could display the individual thumbnail images as they become available.
Notice that the retrieveImage method adds a property change listener to the ImageRetriever instance before executing the thread.
It’s best to build in the monitoring and management capabilities up front.
Premium SupportThe Premium level is more sophisticated.
Despite these tasks, your UI can remain snappy and responsive to the user.
They contacted our JVM experts directly, and Sun began debugging the issue.
Although you can call the get method from the EDT, this method will block until the worker thread is done.
You don’t have to wait until the thread completes before getting intermediate results.
However, with just a little more effort, you can extract more work from a SwingWorker subclass.
A SwingWorker thread updates both the progress bar and the label image.
You can use the publish method to deliver intermediate results of your processing.
The listImagesValueChanged method retrieves the selected list item and creates a Flickr service URL string that corresponds to a larger image of the thumbnail.
It’s basically hidden by the JVM.
Personally, I’d like enhancements at the OS or application level to be able to engage in live probing of transactions.
Make the icons semi-transparent and drag the map around, the image is still smooth!
A SwingWorker instance has two important properties: state and progress.
I’d like to see more of that capability.
We have even used the networked drawing and chat functionality to play board games such as Chess.
Notice how this class specifies the Icon return type for the doInBackground and get methods.
Unlike the invokeLater method, the invokeAndWait method is synchronous.
The correct way to use a SwingWorker is to instantiate it, add any property change listeners that might need status event notification from the thread, then execute the thread.
For example, as the ImageSearcher subclass retrieves a list of thumbnail images from a Flickr web service, it could display the individual thumbnail images as they become available.
This method runs on the event dispatch thread.
You don’t have to know much more about either creating or using a simple worker thread.
By providing your UI components in the constructor, you ensure that the worker thread will be able to update those components directly from the done method.

You should use worker threads for tasks such as communicating with databases, a ccessing web resources, and reading or writing large files.
There’s no reason to wait for the entire set of matching images to download bef ore placing intermediate results into a viewable list.
The retrieveImage method shown earlier creates an ImageRetriever and provides a JLabel reference that the worker thread will use to display an image.
Solaris, Linux, and Windows each have different sets of debugging tools at the O S level.
The listImagesValueChanged method is the event handler.
The retrieveImage method contains the important code for creating and using th e ImageRetriever worker thread.
The retrieveImage method and its EDT no longer need access to the worker threa d.
Because the web service provides results in numbered pages, you can use the pag e argument to determine what set of matching thumbnails to retrieve.
Because the web service provides results in numbered pages, you can use the pag e argument to determine what set of matching thumbnails to retrieve.
Here’s another example of a future issue in which Sun could assist.
If you use inner classes, you might not even provide this information in the co nstructor, because the worker thread will be able to access the information dir ectly.
When implementing a SwingWorker subclass, you specify both the final and interm ediate result types in the class declaration.
If developers can isolate the problem at the JVM level, they can debug it.
However, with just a little more effort, you can extract more work from a Swin gWorker subclass.
Download a larger image by selecting a thumbnail.
It also provides progress information to a listener that updates a progress ba r in the MainFrame class.
For many years, I have seen a need for a simple graphics program to support oper ational planning.
To get a basic understanding of Swing UI concepts, including event handlers and listeners, and learn more about UI programming, follow the Java Tutorial’s Swi ng trail.
The result is that applications become unresponsive or sluggish because they pe rform long-running tasks on the EDT instead of on separate worker threads.
The method is asynchronous, which means that the call will return immediately t o the calling thread.
If it were not for the relative simplicity and robustness of the Java language, I would not be able to straddle the fence with a foot in both the military and s oftware development camps.
This method can perform numerous tasks, but in a typical Swing application, its last and major task is to create and run the application’s UI.
You can modify the application to download more or fewer images.
DTrace is a comprehensive dynamic tracing facility that is built into the Solari s OS.
However, you should still avoid it.
This is a good place to call the get method because you know that the thread’s work is finished when this method executes.
This article will not describe the doInBackground, done, get, and setProgress methods further because they are essentially the same as those in the other cla ss.
Now suppose the applications crash simultaneously.
The effect is an unresponsive GUI that gets choked with a backlog of waiting eve nts, causing the GUI to become sluggish and unappealing to the user.
The Runnable interface defines a task that can be executed as a thread Use the invokeLater method to correctly instantiate your application UI from the initi al thread.
That’s the easiest part.
The correct way to use a SwingWorker is to instantiate it, add any property cha

nge listeners that might need status event notification from the thread, then e xecute the thread.
Override the process method to work with intermediate results.
In the Solaris OS, the DBX debugger program looks at the Solaris structure.
DTrace is a comprehensive dynamic tracing facility that is built into the Solari s OS.
Customers that have not planned for this time change could face critical impact to their business because older versions of the Java platform might not report t ime accurately.
As the worker thread executes, it can publish results of V type.
We’ve got it up and running, but it’s only a temporary work-around.
If you have any questions, please refer to the Sun Online Privacy Policy or emai l us.
Forging Ahead With SwingWorker Fundamentals This section provides a quick tour of SwingWorker functionality.
But that’s at the OS level.
SwingUtilities class contains a collection of static methods that help you inte ract with UI components.
Because it is a Future type, a SwingWorker will provide its execution results in a value of type T and will provide a way to interact with the thread.
JTop sorts threads by the amount of CPU usage, allowing you to easily detect a thread that is using inordinate amounts of CPU time.
This method runs on the event dispatch thread.
If Wall Street stock trading stops for five seconds, there are regulatory implic ations.
These methods and others like them should not run on the EDT.
Also, interacting with Swing components or their default data models from initi al or worker threads is not a safe operation.
Because the web service provides results in numbered pages, you can use the pag e argument to determine what set of matching thumbnails to retrieve.
PremiumPLUS SupportSuppose we’ve identified and isolated a problem in a JVM.
The Premium plan covers this.
" JTop is a JDK demo that displays an application’s usage of CPU time per thread .
In addition, customers deploying Java technology in mission-critical environment s might want to take advantage of the PremiumPLUS service, which provides except ion releases patches.
The ImageSearcher class is responsible for searching and retrieving thumbnail i mages for the UI’s list.
Swing applications have a single EDT for the UI.
Sun Java MultiPlatform may assist customers by providing round-the-clock phone s upport and product escalation for defects.
Override the process method to work with intermediate results.
It enables you to examine the behavior of user programs as well as the behavior of the operating system.
Additionally, the demo shows you how to cancel tasks and how to get intermediat e results before the complete task has finished.
A worker thread is in the DONE state after its doInBackground method finishes.
Because it is a Future type, a SwingWorker will provide its execution results in a value of type T and will provide a way to interact with the thread.
The application has two progress bars, one that tracks the search for and retri eval of the thumbnail image and another that tracks the download of a larger im age.
The resulting Overlay Maker looks nothing like the original.
Tell us about the differences in debugging Java software on Linux, Windows, and Solaris.
You can add listeners that receive notification when this property changes.
We have many software tools to do this but very few are simple, and most were wr itten by people that do not really understand our requirements.
The retrieveImage method contains the important code for creating and using th

e ImageRetriever worker thread.
Additionally, the demo shows you how to cancel tasks and how to get intermediate results before the complete task has finished.
This class is similar to ImageRetriever because it updates a progress bar and provides image data.
All event handlers run on the EDT, and you should programmatically interact with your UI components and their basic data models only on the EDT.
For the EDT, that purpose is to draw and update the UI while responding to user interactions.
You ask, "Why is this doing that?
" That’s where Sun can help.
Interestingly, the process method will execute from the EDT.
In three words: Performance, performance, performance.
Like all insurance policies, you hope you never need it, but when you do, you’re glad you have it.
The application has two SwingWorker subclasses: ImageSearcher and ImageRetriever.