

Using the Wireless Portal

Ask Project Gateway

The Project Gateway Repository Suite contains support for wireless access to the Project Gateway repository. This allows users of Palm VII, Palm V/Omnisky, and future compatible devices to interact with the repository.

The Wireless Portal database acts as an interface between the wireless users and the repository. It provides registration and authentication of the individuals allowed to access the repository and a special user interface designed for the limited screen real estate and bandwidth of the wireless devices.

To access a particular portal, you must have a custom made PQA (Palm Query Application) installed on your Palm device. These custom PQA's are easily created from the standard AskPG design that we supply using the tools provided by Palm Computing. Marin Research will also build the custom AskPG PQA for you for a fee.



Portal Operation

The portal receives HTTP instructions that were initiated from the Wireless device. It then looks up the requested information from the connected repository, formats the data and sends it back to the requester.

The operation is stateless, nothing is retained from one transaction to another at the server.

The initial query is for a Project, Program, Organization, or Participant. A text string is provided as part of the query. The first part of the subject name is matched to the text string. If exactly one match is

found, a report is generated on that topic. If multiple matches are found, a list of matching items is returned to the user. The user can then select from a drop list and submit another request.

The design minimizes the text entry required by the user. In most cases, an item can be selected with just a couple of characters.

The report that is returned will contain buttons leading to further reports and various user input forms. These reports and actions are self explanatory and no user training should be required.

Installing the Wireless Access Portal database

Creating the database

Create a database using the supplied PGxxWIRE design template on the same server as the Project Gateway Repository Center database. The file name of the database can be anything, but we suggest "palmport.nsf." Each portal can access only one repository.

Sign this new database with a user id that has [PGMASTER] and [PGADMIN] rights in the associated Project Gateway repository.

Setting Access Control and Roles

1. Give the [PGADMIN] role to the ID used to sign the database, and the ID of the administrator(s) and the person doing portal user registrations.
2. Set the access of these people to "Manager."
3. Set the default access to None.
4. On the Advanced dialog, set the maximum Web access to "Depositor" and set enforce access control as on.

Create an Administration Form (Menu - Create - Administration Form)

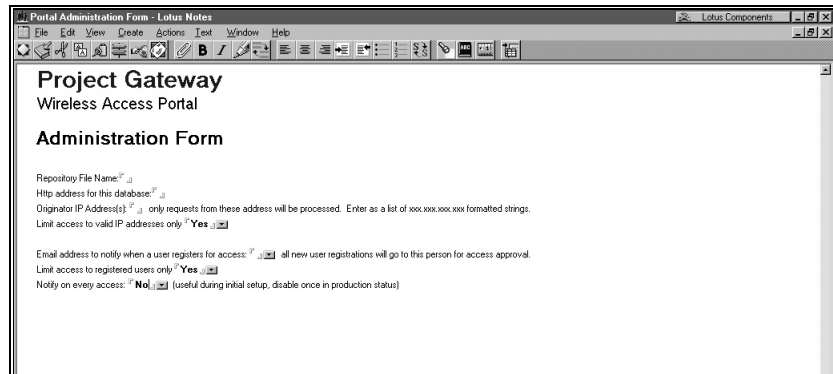
1. Enter the file path to the Repository Center database in the Repository File Name field. The proper form of this filepath can be found by looking at the database properties of the Repository Center database.
2. Enter the HTTP address for this database (the portal you are making) in the HTTP address field. This address must begin with "http://" and end with the database name (i.e., palmport.nsf).

Note: You can tell if this is accurate by copying the text to the location field of your browser - if you see the about database page, then it is working.

3. Enter the Originator IP addresses of the proxy servers from which the wireless requests will be coming. You may have to enter several addresses to accommodate different services.

At the time this was written, the Palm.Net service IP address was 209.247.108.98 and the Omnisky service address was 208.178.168.193

4. Set the **Limit access to designated IP address** option. This would normally be Yes, but for your own testing you might want to allow web browsers to access the database for a short period.



5. Select the name of the person who will receive all registration requests from your address book. Make sure that this person has author rights to this database.

6. Set the **Limit access to registered users** option. If you set this option to Yes, then only those people you have registered will be able to access the portal. If you set it to No, then anyone with your site specific PQA will be able to access. If this option is set to yes, then unregistered users will receive registration forms (see below.)

7. Set the notify on every access to Yes for a short period until you have the system running. You will receive an email for every access attempt. After the system is running properly, you should reset this to No.

Creating and Distributing the AskPG PQA

You must create the specific AskPG PQA for your database and distribute it to your Palm VII and Omnisky users. The source files are found in the \WIRELESS subdirectory of the CD.

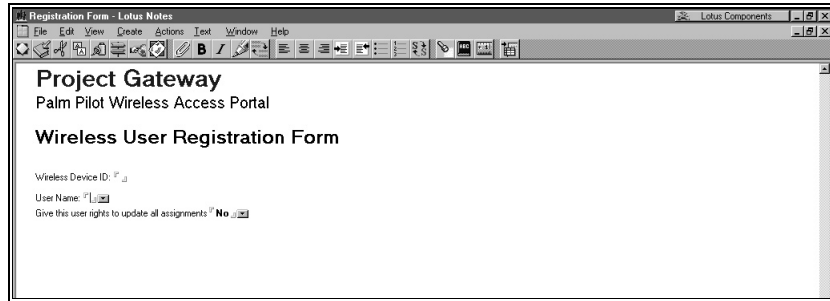
To do this yourself, get the Palm Developers tools from www.palm.com and then get the appropriate technote from the support page of the Marin Research site. Marin Research will create this PQA for you for a fee.

The URL of the portal database is used to create the PQA application, so you must have installed the database first before building the PQA.

You must distribute the PQA to your users. They will need to install the application onto their devices using the HotSync process or by beaming it from one device to another.

Registering Your Wireless Users

When an unregistered user attempts to request information using the AskPG application, the system responds by sending a "Registration Form". This form asks for the name, phone, email, and manager of the requester.



When this form is submitted, an email is sent to the person designated as Portal Registrar. In the email will be the device id of the Palm VII device as well as the requested information from the form.

The registrar should then contact the person to make sure that this is a valid request and then create a User Registration Form in this database.

Normally, only assignments owned by the specified UserName can be updated. An update button will appear automatically when such assignments are displayed. An option on the form allows this user to act like a [PGADMIN] and update any assignment in the repository.

Special Registration Options

To allow Palm Pilot Emulators to access the portal, register the Device ID of "0.0.0" with a user name. This might be useful for classroom training or testing of custom pqa's.

Web Browser Access

For testing purposes, you can access the portal from a web browser. This process bypasses the device authentication and the normal access control limitations of the repository. A browser anywhere could access your repository. You can improve the security somewhat by limiting valid IP addresses to those within your firewall, but it still should be used only for training or public information.

1. Disable IP Origin validation and Registered user validation in the Administration form of the portal.

2. Create a registered user named "Web User" (capitalization and the space is required)

2. Enter the following into your browser:

<http://www.myco.com/./portal.nsf/askpgpalm?openagent&Gateway=1>

When the agent sees the &Gateway=1 parameter, it will return an Ask Project Gateway page to the browser, allowing you to request reports.

Remember to re-establish security after this use by removing the Web User from the registered user list and by re-engaging IP validation and user validation.

Licensing Considerations

All wireless users must be licensed as Project Gateway users.