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After writing the original The Hackers Guide to GoldMine books, I found that a lot of my readers really appreciated the content, and the way that I handled the subject matter. However, they all, and I do mean all, wanted more. "Could you cover Reports?" "Could you cover GoldSync?"

I felt that GoldSync is an often maligned subject, and that there is little good documentation on the subject. I, therefore, decided to include this chapter in The Hacker's Guide to GoldMine series of books after the first book in this series, and continuing that line, in The Definitive Guide series of books.

There has been a few changes over the years, however, there has been little change in GoldSync between GoldMine 7 Corporate Edition, and GoldMine Premium other than possibly menu location, and performance fixes.

I will begin my discussion with the Synchronization Settings, which is actually a GUI for the GoldSync.ini. I then plan to cover the Server-side set up of GoldSync, the IP Address, and ending my portion of this chapter with the Remote-side set up of GoldSync. Finally, I have been able to add, thanks to David Lee the author, a Whitepaper on GoldSync which you GoldSync Administrators should find to be an eye opener.

GoldMine supplies a GUI interface to some of the GoldSync.ini settings. This can be found by users possessing Master Rights, when they select:

Tools
Synchronize ►
Synchronization Settings...

...from the GoldMine menu. This will bring up the dialog form shown here in Figure 14-1:

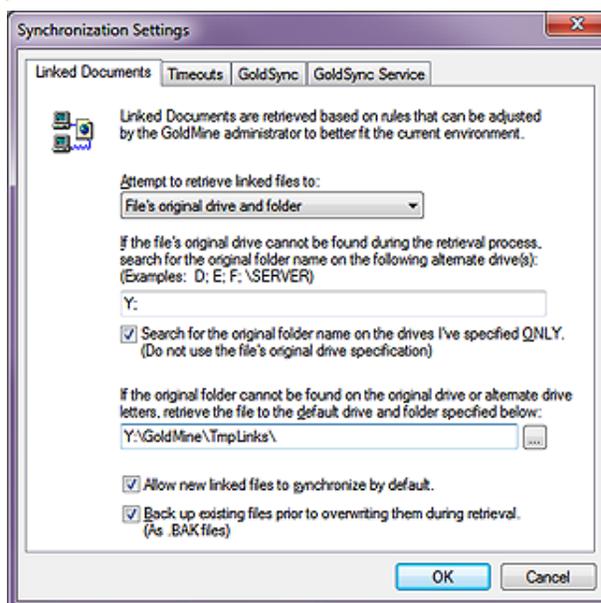


Figure 14-1

On initialization, the GUI positions you on the **Linked Documents** tab, and it is here that one sets their options for the GoldSync actions with regards to Linked Documents retrieved during the synchronization process. The key word here is retrieved. GoldSync wants to know what rules to enforce when retrieving a linked documents, and remember, that these rules must be established **Server-side**, and **Remote-side** alike. They are specific to side that is being set up.

Note

In older versions of GoldMine this GUI was found under the user Preferences, Sync tab. As of GoldMine Premium, it has been moved to this, a more corporate accessible location.

Tip

The Server-side GoldMine installation should always be via a mapped drive letter resulting in a path similar to:

`Y:\GoldMine\...`

Whereas the Remote-side GoldMine installation should always be to the C:\ or D:\ drive letter resulting in a path similar to:

`C:\GoldMine\...`

Tip

I always recommend that you create a folder under the GoldMine folder, and then train your end users to store all of their linked documents under that folder, both those sent and those retrieved.

Let GoldMine be your document manager.

If you follow this philosophy, then it is extremely important that you maintain this pathing, less the drive letter, on all of the Remote-sides as well.

Note

The settings displayed in Figure 14-1 apply to the Server-side on my system, but all of the Remote-sides must be configured as well. Usually the only differences between the two sides are the drive mappings.

Let's look at the first rule under this tab. **Attempt to retrieve linked files to:** is a drop list with but two choices. The default choice is: **File's original drive and folder**, while the other option is: **Specified default drive and folder**. As preparation for this choice, I suggest that you read the Tip in the sidebar. I would suggest, unless you have reason to do otherwise, that you stick with the default selection in this case.

If you followed my tip, then the next option is where one would establish a rule that will compensate for the drive letter differences in between the Server-side path and the Remote-side path. For Instance; your Remote-side might save a linked document in: **C:\GoldMine\Documents**, while the comparable path on the Server-side might be: **Y:\GoldMine\Documents**. Since the file's original path, including drive letter, does not exist on the server, it is important that one suggests other possible drive letters. As I never recommend using UNC paths, `\\Server\C\`, I do not suggest that you incorporate any of these in this rule. All of the optional drives to be searched should be separated with a semicolon (;). Based upon my For Instance, I would want to include **Y** in this space on the Server-side configuration, while I would have used a **C** on the Remote-side configuration.

As you may know, based on this configuration, that the linked document drive location will never be the same as the senders linked document drive location, you may want to reduce some search time by selecting **Search for the original folder name on the drives I've specified ONLY. (Do not use the file's original drive specification)**. This will force GoldMine to not search in the path of the documents original drive letter, bypassing one step.

Next, one must instruct GoldMine as to where the linked document files should be placed if, and when GoldMine can not find a place to put the document based on the afore mentioned rules. The default setting is always under the GoldMine folder, in a folder called **TmpLinks**. There should be no reason for you, Server-side or Remote-side to adjust this option.

The next option is interesting. By default, it is selected. **Allow new linked files to synchronize by default**. In the days of yore, one had to make sure that they selected to allow the file to synchronize when they were creating the Linked Document, and there were many times when the user would forget to select that option. Of course, back then, dial-up Internet was the fastest way to synchronize, and one may not have wanted to synchronize documents in an attempt to keep the transfer set size to a minimum. Today, with high speed Internet, this is a rather moot point, hence the reason that this option was added here as an override feature to reinstate the default behavior.

While the next option, **Back up existing files prior to overwriting them during retrieval. (As .BAK files)**, is also selected by default. Personally, I do not feel that this is necessary as there is a back up already at the transfer set senders location. As always, I leave the choice up to your discretion. At the cost of hard drive space today, storage is not an issue, so what would it hurt to leave the default setting?

Any changes made under this tab are reflected in the GoldSync.ini thusly:

```
[LDRetrieval]
Option=0
Backup=1
UseAltDrivesOnly=1
AltDrives=Y
TmpLinksPath=Y:\GoldMine\TmpLinks\
```

Timeouts

This tab is a legacy hold over, and in point of fact, some of the settings contained in the GoldSync.ini can only be accessed by editing the GoldSync.ini directly. As the verbiage on the dialog form states, *"The options below allow you to override the default handshake timeouts of each synchronization method. There is usually no reason to change the defaults."* As you might have surmised, the statement hasn't been changed, it still states *"...each synchronization method."*, but the dialog form only shows one synchronization method, the **Internet Connection Method**. I will discuss the GUI first, shown in Figure 14-2 on the next page.

The **Handshake timeout (sec):** is set by default to **20** seconds, while the **Connection timeout (sec):** is set to **60** seconds by default. I have chosen not to accept the defaults, and I am actually utilizing **60**, and **120** respectively. Why? It has always worked in the past so why change it if it hasn't failed. In other words, it was set that way when I was synchronizing via a dial-up connection, and as I upgraded GoldMine through the years, the settings have gone right along with the upgrade. Once changed, they could be reset to their default state by simply clicking upon the **Set Defaults** button. One might want to, or need to change these settings if they had slow Internet connectivity. These days, in corporations, that is relatively unheard of. Yet GoldMine sells to the masses, and many of its users are 1, 3, 5, and 10 license users that have a tendency to have the cheapest, slowest Internet access. Hence, the need for FrontRange to maintain this GUI.

I have had the need to double these settings for a couple of my clients. In a couple of cases only, I have set these to 40, and 120 respectively.

Any changes would affect this section of the GoldSync.ini:

```
[GoldSync]
ModemTimeOut=10
WanTimeOut=20
WanRereadTime=100
mInetConnTimeOut=120
mInetHSTimeOut=60
```

I have included some of the legacy items in this section, however, only those in dark blue are affected by the Timeouts tab via the GUI. The others, if they are to be changed at all, must be changed by hand by modifying the GoldSync.ini using NotePad.exe. Again, if you must change any of the GoldMine ini's, I always recommend that you do so using the NotePad.exe application to ward off any risk of formatted characters being included in the ini.

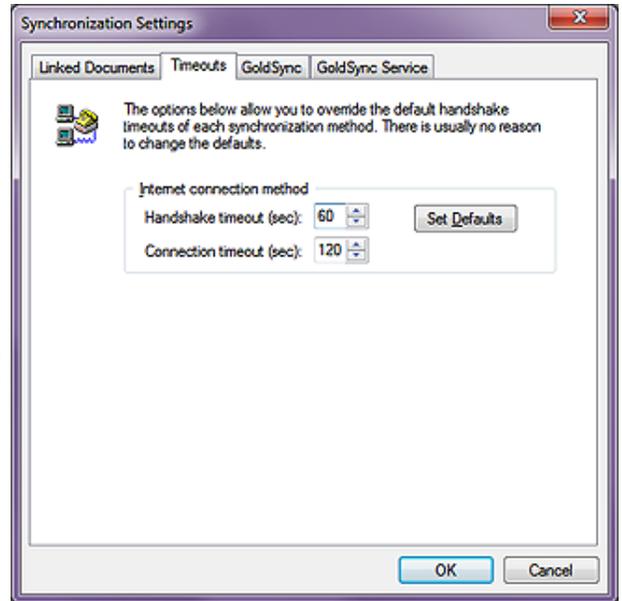


Figure 14-2

You will notice that the first statement is for modem handshake, while the next two are for Wide Area Network (WAN) handshake, and connection. I have seen the need to change the WAN settings occasionally, but it has been a long, long time since I have seen anyone change the modem setting.

GoldSync

With respect to the life of GoldMine, the GoldSync tab, Figure 14-3, is relatively new, and allows one to automatically have an e-mail sent to a given e-mail address if, and when a particular synchronization session fails.

This is a relatively simple dialog. One must check the box, and one must add an e-mail address, if they desire this feature. Doing so could result in these GoldSync.ini settings:

```
[GoldSync]
EmailErrors=1
EmailAddr=DJ@DJHunt.US
```

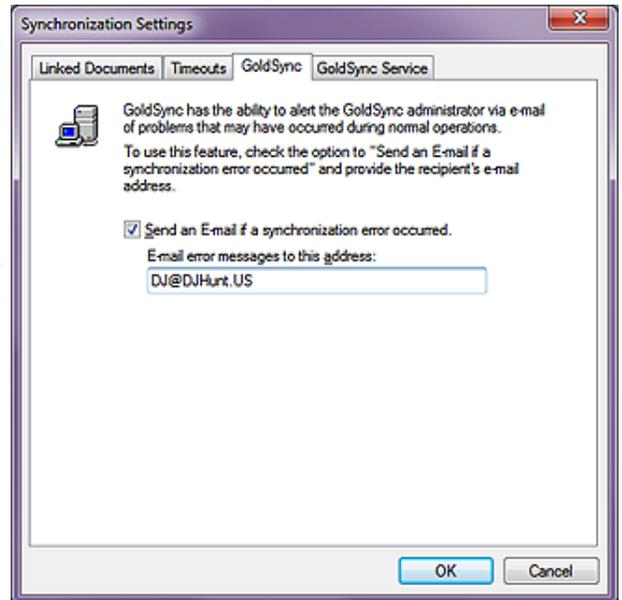


Figure 14-3

That was pretty much all that there was to the GoldSync.ini GUI in GoldMine versions prior to 6.50.31113, however, with the introduction of newer versions came a new tab, **GoldSync Service**, refer to Figure 14-4 on the next page. This had been an often requested addition to GoldMine, the ability to run GoldSync as a Service. This tab offers one of the couple of ways of installing GoldSync as a Service. The Administrator simply clicks upon the **Set up GoldSync as a Service** button, and that's it. Once established, this button will be disabled, while the other two buttons will become enabled. Once the service is established, you may select to **Configure GoldSync Service** or to **Uninstall GoldSync Service**, neither of which requires a brain surgeon to manage. One may also **Start**, and **Stop** the **GoldSync Service** from the **GoldSync Administration Center** discussed later in this chapter.

GoldSync Service

WARNING

At this writing, I can still not recommend the use of the GoldSync Service. Many users find its stability, even today, to be iffy on the best of days.

You should remember that it is important that the **GoldSync.ini** be setup **Server-side**, and **Remote-side** with settings that are appropriate to the side on which you are working. For example on the Server-side the local drive to search for documents might be the **Y** drive, while on the Remote-side that same entry might be the **C** drive. If documents aren't moving back, and forth smoothly, this is one of the first places that I look for fault.

GoldSync Server-side

Note

In setting up the Server-side for GoldSync, one would be offered the opportunity to create an undocked license if an available undocked license could not be found.

After years of practice, however, I have found that my system works. In this book, therefore, I will convey my system, and you may modify that according to your needs and desires.

Note

You are advised that these steps should be performed on the system that will be acting as your GoldSync Server. That way, when we configure the GoldSync Server itself, it will be configured for the correct system.

You may, however, set up different servers, if you so choose, after you have the first setup working properly.

Note

Why have multiple Site Groups?

Each Site Group can have its own synchronization settings, and the settings are inherited by the remotes within that Site Group unless you specifically override a particular remotes inherited settings.

Instead of having to do each remote site individually, it is sometimes easier to simply add them to an existing group that has similar settings.

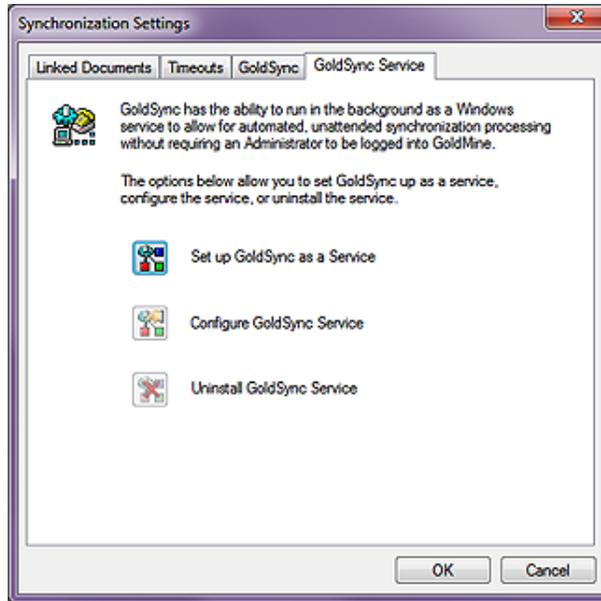


Figure 14-4



Figure 14-5

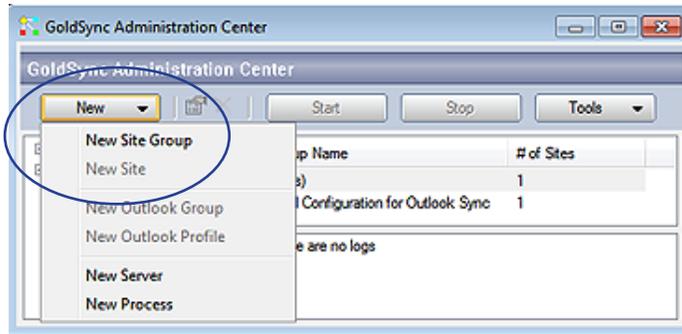


Figure 14-6

corporate GoldMine. These could either be Undocked Licenses or Site Licenses, it does not matter.



Figure 14-7

Let's begin to look at the **GoldSync Server-Side** setups, but before we begin that, I am going to assume that I will have at least one **Remote-side** install. Based on that assumption, I will first want you to create an **Undocked User License** or a **Site License** via the **License Manager**. The **License Manager** was covered earlier back in **Chapter 2** so I will not be reexamining it here. If you are following along, please create an Undocked License or Site License for a user or site now, in preparation for our Server-side setup.

Again, from the GoldMine menu:

Tools

- Synchronize ►
- Synchronization Settings...

This should, if you haven't set up anything here in the past, bring up a message box as shown here in Figure 14-5, which I have already accomplished so I had to copy this image from a previous book.

I want to walk you through this by hand, such that I have selected the **No** button on this message box. This action results in the display form shown in Figure 14-6. Of course yours won't have anything under the **Site Groups** or **Servers** if this is the first time that you are in this dialog form. From here, the first thing that I will do is to create a **Site Group**. These are the remote sites that will be synchronizing with your

To begin this task, I can either click on the **New Site Group** menu item (encircled) or I can right-click the **Site Groups** tree, and select **New...** ► from the local menu, and then again on **New Site Group**. Either selection begins the Wizard, which will walk one through the creation process, the first page of which is shown here in Figure 14-7.

This dialog page is simply asking for a colloquial name that you wish to use to describe this particular site group. If you plan to utilize

Note

Rule of Thumb:

Will you understand what is contained in this site group if you haven't seen the GoldSync Administrator for over a year?

You do this because GoldSync offers you the ability to add multiple Site Groups.

multiple site groups, then you want to make certain that these descriptive names are, in fact, descriptive. I have entered **Remote User(s)** for this my first site group, and then clicked on the **Next >** button.

This action would then bring us to the next dialog page as shown Figure 14-8. You will notice that there are two separate frames, however, they both contain radio button selections. Even though they are dispersed between two frames, one may only choose a single radio button from anywhere on this dialog form. For this exercise, the frame that I am interested in is the **Connected Methods (IP to IP/Network)**. The other frame is for **Non-Connected Methods (Internet E-mail, Shared Directories)**. In the former frame, I have two methods from which I may choose:

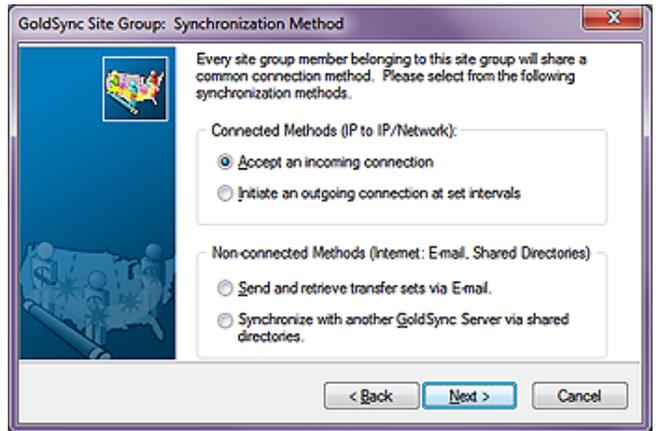


Figure 14-8

- Accept an incoming connection**
- Initiate an outgoing connection at set intervals**

While the latter frame, which also has two methods, contains:

- Send and retrieve transfer sets via E-mail.**
- Synchronize with another GoldSync Server via shared directories.**

I have accepted the default of **Accept an incoming connection** from this **Site Group**, and then I go ahead and clicked upon the **Next >** button to move on to the next dialog page of the Wizard as depicted in Figure 14-9.

Tip

It is important that you position your frame of mind properly when walking through the Wizard.

I am currently setting up the Server-side, hence, my settings, for what I am sending, are based on what the Server-side is sending to the Site Group, as the retrieve options are what the Server-side is willing to retrieve from the Site Group.

When I get to setting up the Remote-side, the reverse is true. From that position, I will be setting up GoldSync to say what the Remote-side will send or accept from, and to the Server-side.

Additionally, it is important that you understand that just because the Server-side is sending the information, if the Remote-side is not equally set to retrieve that information, then the information effectively goes no where.

Understanding your position with respect to Server-side/Remote-side is extremely important.

Your first two options are usually selected as the default state of this Wizard, and I would recommend that you keep them selected.

- Send changed data to site group's members**
- Retrieve changed data from site group's members**

This is your first real indication that you are not setting up a sync session for an individual, but, instead, that you are setting up the sync session for a group of individuals. Whatever you set on these pages will be the default setting for the Server-side for all sync sessions, unless they are specifically overridden on a site by site basis.

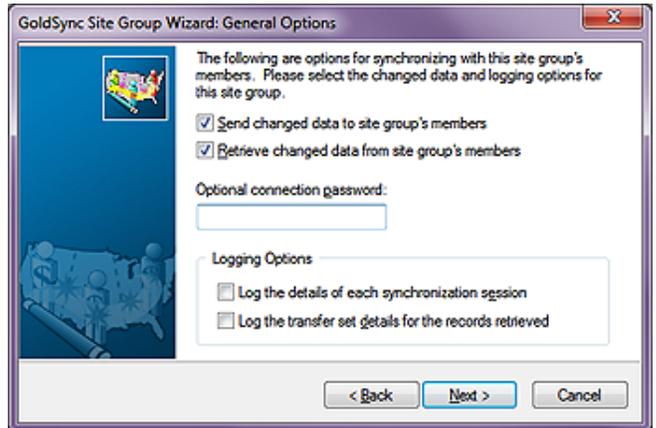


Figure 14-9

With these two options selected, I am stating that the Server-side is willing to send, and retrieve information from any sites associated with this site group.

I am next presented with the option to supply an **Optional connection password**, and I decline this option. If you are really super security conscious, you may, indeed, want to supply a password here. Should you, however, you must remember to set the exact same password on the Remote-side setup or the synchronization process will fail.

Next I have the frame for the **Log Options**. Selecting these options will cause the GSLogs table to become extremely large over time. Personally, I usually will select the first option, and not the second option. I later refine this if the syncs are going well, or badly as is appropriate. If they are going well, I will deselect the first option, while if they are going badly, I may select the second option.

Tip

If synchronization is up-to-date for all of your Remote-side users, I always recommend that you Purge your TLogs on a daily basis. Remember that this is two-sided activity again, and purging must be done on the Remote-side as well as the Server-side.

Note

David Lee, Whitepaper author, points out that Generate transfer sets in advance for site group member(s) to pick up speed has little to do with connection speed. Rather, it has to do with the time required to build the transfer set itself if in a large user environment. On larger installs with large numbers of users and/or large databases, you could get a big traffic jam. Queued processing could be very helpful in this scenario.

- Log the details of each synchronization session
- Log the transfer set details for the records retrieved

The first option only logs the main details. Was the session successful? How many Contact Updates or New records were added? While the second option logs the minutia of detail that is happening on a record by record basis. I think that you can see that if you had a number of remotes synchronizing daily, your TLogs, when this option is selected, could become extremely large very quickly, and you should be constantly purging your TLogs (hopefully). That reminds me, I haven't Purged my TLogs in some time.

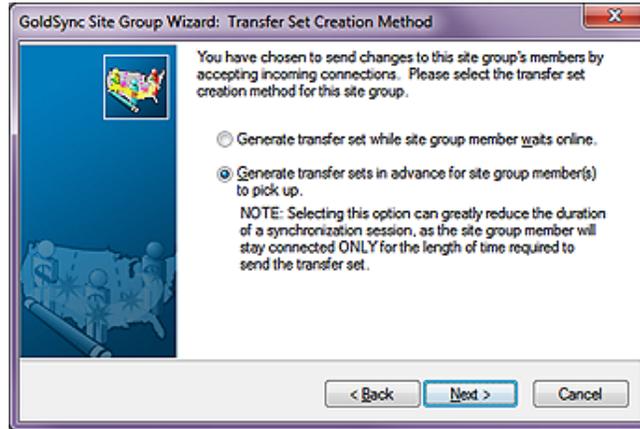


Figure 14-10

Again, I select the first option only at this point, and then I click upon the **Next >** button to bring me to the next dialog page, the **Transfer Set Creation Method** page of the wizard, shown here in Figure 14-10.

This dialog page is what I call a legacy hold over. With the advent of high speed Internet, and high speed networks, the default option to **Generate transfer sets in advance for site group member(s) to pick up.** is not as necessary as it was in the past, where dial-up network-

ing was relatively slow. In fact, I have not selected this option for my clients in over 4 years, and I probably never will need to select this option again.

I always select to **Generate transfer set while site group member waits online.** over the default option given todays environments. I would then click on the **Next >** button again to move along to the next dialog page. Refer to the **Send Options** page of the wizard, Figure 14-11, to continue

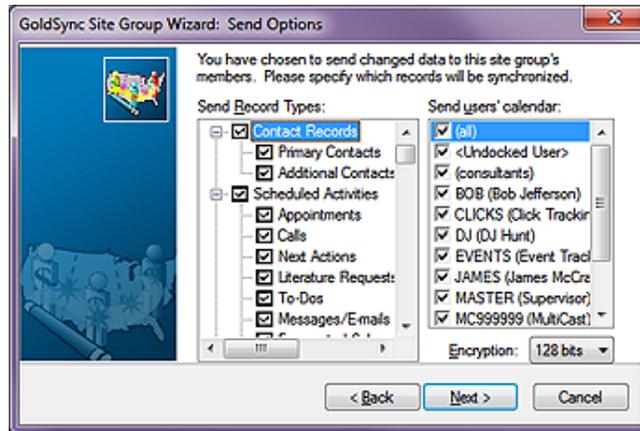


Figure 14-11

following along with my ramblings. Again, remembering our position, these settings will pertain to what the Server-side wishes to send to the Remote-side recipients.

For this exercise, I will make the assumption that my remote recipients, as a group, will receive everything that the GoldMine Server-side has to give out. By default all of these items are selected, but to assure myself that this is the case, I right-click over the **Send Record Types:** list to bring up the local menu. From the resulting local

menu, I will choose **Select All.**

I then right-click over the **Send users' calendar:** list, and again, I choose **Select All** from the resulting local menu. This assures me that the Server-side will be sending everything for everybody to each of the remote recipients in this group.

As always, when I am setting up the Remote-side, I could select to not accept everything that the Server-side has offered in the transfer set. Both sides, respectively, must decide what they wish to send, and what they wish to receive from each other. As this is a Group setting, you should understand that you can always override these settings on an individual basis. I can tell you here and now that I never send everything from the Server-side to the Remote-side. I make good use of the individual overrides.

There is an additional entry, on Figure 14-11, that I should discuss, **Encryption:**. You have but two options, the default **128 bits**, or **32 bits**. This is also more of a legacy hold over from when we were not allowed, by law, to send encryption routines out of the United States that were higher than 32 bits. Today, of course, that no longer matters, and most users will just accept the default 128 bits option.

Note

I would not normally do this when I can see all of the Users/User Groups in my list. Simply selecting (all) should suffice.

Tip

I actually have two databases configured. For years I have espoused that you should only have one database with two exceptions.

If you purchase a mailing list, you may want to put it into a separate GoldMine Contact Set until you have had time to qualify the names. At that time, you would move the qualified names into your working GoldMine Contact Set.

The second scenario would be when you are Importing records into GoldMine. It is sometimes wiser to Import them into a separate Contact Set, than into your working Contact Set. Once, you have ascertained that the Import was as you desired, you could then move those records into your working Contact Set.

David Lee points out two other approved reasons for additional databases:

- A. A training database
- B. An Archive database

Tip

The File Code for a given database must be the same on both the Server-side and the Remote-side.

Click the **Next >** button, and move on to Figure 14-12, **Send Contact-related Options**. From this dialog form I have a drop list which provides three options from which to choose, and I have my databases from which I may desire to send information. I will elaborate more on this in a minute.

Let's look at the first option that one must make a decision about.

The items that one has from which to choose are:

- All changed contact records**
- Contact records linked to the 'Send user's calendar' list**
- All filtered records and user-scheduled activities' records**

For this exercise, for these site groups, I choose to send **All changed contact records**. There may be cases where one might want to send just a filtered set of contact information to the Remote-side. That being the case, I suggest that you do not set it here for the site group in general, but instead, with an override which I will discuss later in this chapter.

Next, the GoldMine Wizard asks us to **Please select the contact sets you wish to send to the site group members..** As this implies, one could send deltas from one database or from many databases. I almost want to call this a legacy hold over as well, as I advocate that you should have only one working Contact Set, and certainly, by my paradigm, you would not want to synchronize more than one database. This is especially true today with the enhancements to **Record Typing** that we saw emerging back in GoldMine 6.5. However, all that said, this section provides one with the ability to send, and later retrieve, from more than one contact dataset. For this exercise, as you can plainly see in Figure 14-12, I have selected **COMMON: SQLGOLDMINE**. Please note that the alias **COMMON:** represents a unique File Code which you are required to enter for all newly created databases. I used **COMMON**, whereas you could name yours anything unique to your datasets.

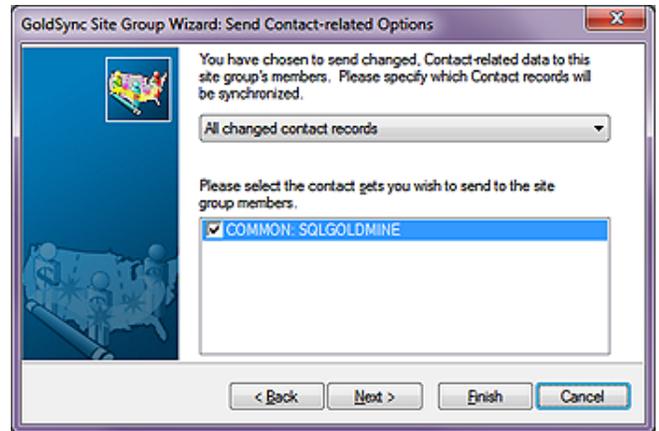


Figure 14-12

Click on the **Next >** button to move yourself to the next dialog page of the Wizard, shown here in Figure 14-13.

This is the **Send Filter Options** page of the Wizard. From this drop list, you would be able to select the default **All Contact Records!**, or from the **< Filters of: DJ (DJ Hunt)... >** which means you could utilize any users filters that exist in your GoldMine database. Again, as I am establishing the Site Group settings, I will select the default, and override the individual sites for filtering if and when necessary.



Figure 14-13

Let's click on that **Next >** button as shown on Figure 14-13 to move ahead to Figure 14-14 which can be view by the reader on the next page.

As you see in Figure 14-14, on the next page, I now have the ability to define what the Server-side is willing to accept (Retrieve) from the Remote-side users who are part of this Site Group. On this, the **Retrieve Options** dialog page of the Wizard, and as this is the retrieve options for all users in this Site Group, I will right-click in the **Retrieve record types:** list, and I will choose **Select All** from the Local Menu. Under the **Retrieve user's calendar:** list, I will right-click, and I will choose **Select All** just as I had done for the Send Options for the Site Group.

Tip

Even though I have asked you to **Select All**, you may want to consider turning off, unchecking, the **Logs**. These can grow abnormally large if not purged regularly, and are not necessary to retrieve from the Remote-side unless you are experiencing issues with synchronization, and you wish to analyze the **TLogs**.

Tip

David Lee says: "You might want to turn off the ability to accept record deletions." This will protect you from some errors from the Remote-side(s). Instead, develop an SOP where they flag the records as Delete or Archive, and then let the System Administrator globally delete or archive them as appropriate for the needs of the corporation. I recommend this design in almost all large synchronization environments.

WARNING

As of my book *The Hacker's Guide to GoldMine Premium*, you could not use the **Add Other Licenses** option. After a long discussion with FrontRange, FrontRange stated that this option was never meant to work as it had in the past, and that they had corrected it.

In my opinion, it had always worked properly in the past, and what FrontRange considers to be "corrected" in GoldMine Premium, is to not have it function at all.

Am I missing the big picture here?

Either way, I have not tested it to see if FrontRange has gone back to the old functionality in the latest GoldMine Premium 9.0.1.49.

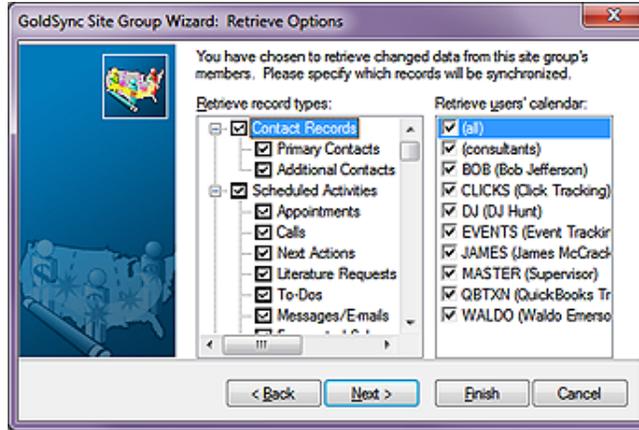


Figure 14-14

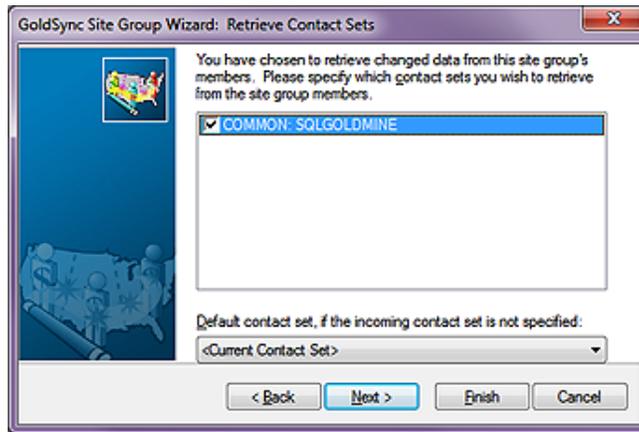


Figure 14-15

usually, however, I opt for the default setting which is to use the **<Current Contact Set>** as I only recommend the use of one database in our paradigm, and, again, I click on the **Next >** button to advance to the next Wizard page.



Figure 14-16

there are no more currently available for this Site Group. As you can see, you could add undocked user(s) or sub-licenses on the fly by clicking on the **Create Undocked User(s)/Sub-License** button. One could also simply use any other GoldMine license via selecting the **Add Other Licenses** option (see sidebar **WARNING**). Either way, you should select and/or create any users that you wish to inherit the properties of this Site Group, and then click on the **Next >** button.

That's it for setting up the Site Group itself. Go ahead, and click on the **Finish** button.

As before, if this is your first time setting up a Site Group, these items should be all selected by default, however, to be safe, I opt for making the selections myself. I trust myself more than I trust the GoldMine designers programming capabilities.

Again, I will click on the **Next >** button to move forward.

I have now advanced to the **Retrieve Contact Sets** page of the Wizard. If you have more than one contact set established, you must select those contact sets that you are willing to retrieve for the Site Group as a whole. For the Site Group, I am willing to retrieve all of the **COMMON: SQLGOLDMINE** contact set, as I can override this on the individual site later on if I find that necessary. You should notice that each dataset is preceded by its unique **File Code**.

The **Default contact set, if the incoming contact set is not specified:** option allows us to select from any of your defined contact sets.

This is the page, Figure 14-16, from which I could select the **Undocked Users/Sites** that will be included in this Site Group assuming that you had preset Undocked/Sub-Licenses Licenses. You may select as many or as few as you wish, but you must have at least one selected for the Site Group or all will be for not.

I had three that were pre-defined via the License Manager as Undocked Users. However, these had been already added to a previously defined Site Group so that

Now, let's make sure that we have an Undocked User License to work with. Go to:

Tools
Configure ►
License Manager...

Now, go ahead, create an Undocked User License if you don't already have one, and then close the License Manager.

Next we'll move back to the GoldSync Administrator as I want to show you one of the overrides that may be beneficial to your organization. I would have you right-click on the Site Group that you previously created, and select **New... ►** from the local menu, and then again select **New Site**.

This action will immediately bring you into another Wizard, that of the **New Site Group Member** Wizard, Figure 14-17, and the alphabetically first of your UserIDs is presented to you for consideration in **Undocked User**:

You may click on the **OK** button to just proceed here, and the Wizard should bring you to the **Welcome to the GoldSync Site Wizard!** dialog form page as shown here in Figure 14-18. You will notice that this dialog form supplies a bit more of the information about this member:

Site Type: Undocked User
Site ID: PKT55-PJ686-1RQ6L - DJ

Tip

Uncheck the **Allow this site to synchronize** option if you would like to create the site first, test it, and after you are satisfied that it is functioning properly, select this option to permit synchronization for the site.

You may change the descriptive name for any of the individual sites in the **To begin, please enter a descriptive name for this site..** By default, on undocked users, the **&UserName**, and

&UserFullName (both GoldMine Macros - see Appendix B) are selected as in my case resulting in **DJ (DJ Hunt)**. Additionally, you will notice that the option, I will **Allow this site to synchronize** is, by default, selected. Later, if I want to stop an individual member from syncing, I simply edit the properties for the member, and deselect this same option. Our goal today, however, is to set up this individual to synchronize.

Clicking upon the **Next >** button will bring you to this **Site Group** dialog form page of the Wizard, Figure 14-19. This is redundant you say.

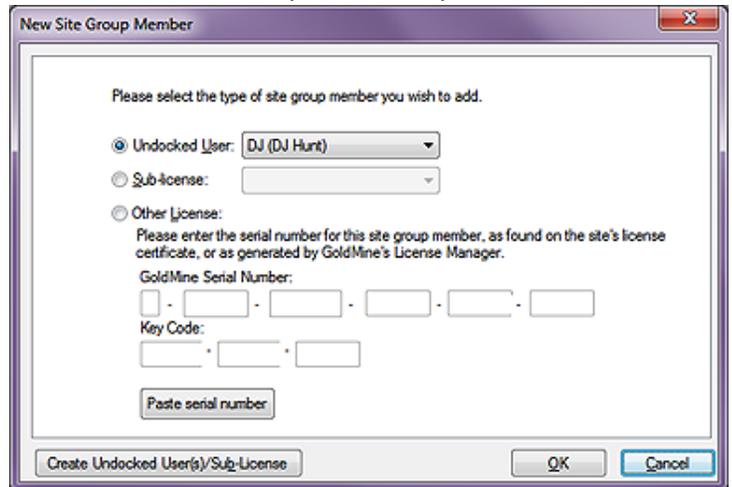


Figure 14-17



Figure 14-18

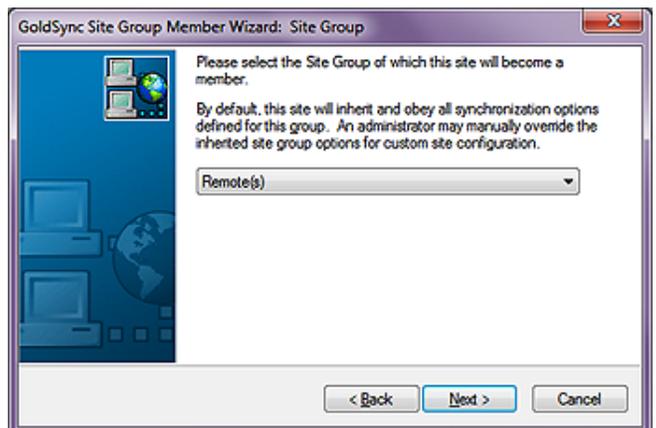


Figure 14-19

Well, yes it is in this case, however, this Wizard is also employed as a stand-a-lone Wizard for adding members to any of the site groups that you may have defined. It is, therefore, a necessary page for this Wizard.

I am simply going to click on the **Next >** button to advance to the next page of the Wizard, and I do hope that you will do the same.

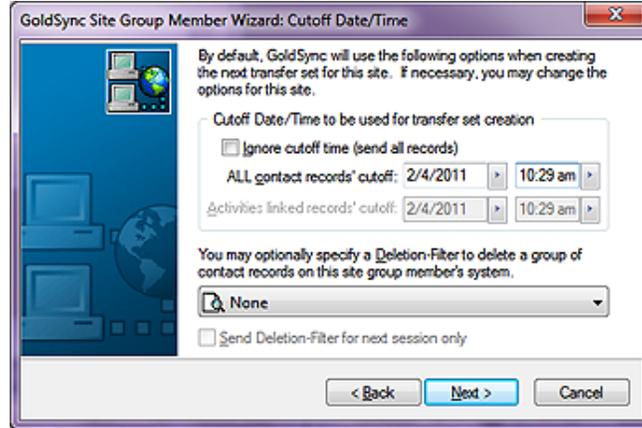


Figure 14-20

Well, our first option in this frame is to **Ignore cutoff time (send all records)**. In past versions of GoldMine, selecting this option has been troublesome, and I advised my clients not to select this option for that very reason. I know that if I would like to get all records to a new site on the first synchronization that this would seem the obvious choice for doing that, yet I prefer the tried & true methodology that I have always employed.

Let's look at another way of doing the very same thing. In Figure 14-20, the current setting for **ALL contact records' cutoff**: is **1/28/2011 11:21 am**. This area allows one to change the specific cutoff date and time, so if one were to set this date back to a time before GoldMine existed, one should, and does, capture all records into their GoldMine transfer set. As VAR's, we are in the habit of using **1/1/1980 (BG - Before GoldMine)** as a good initial cutoff date. GoldMine was first released in 1988, and this date is certainly prior to 1988 or any date that you could possibly have created any of your GoldMine records without having previously modified your System Date.

The next section is unlabeled, but is the option to send a deletion filter to a Remote for deleting records on the Remote-side without having those deletions removed from the Server-side location on the Remote-sides next synchronization effort. One might use this if a group of records were being removed from one Remote-side location, and being reassigned to another Remote-side location. In the drop down list, one may select any predefined filter from any user. Should you select this option, the next option will be enabled. You would probably want to select the **Send Deletion-Filter for next session only** option, however, if you want the Deletion Filter to process on each pass then you would probably not want to select this feature. If the remote user has left the company, then you would want to allow them one last sync to remove all records from their GoldMine. Naturally, this would not remove any backups that they may have created. You would then remove them from the Site Groups list, preventing them from syncing with your GoldMine ever again. However, in case you haven't removed their site from the list after their last synchronization, you would not want to have this option selected. You would want to send the deletion filter until such time as you could remove

This action brings you to the **Cutoff Date/Time** Wizard dialog form, as shown here in Figure 14-20. You will notice that there are two distinct areas. The top most is the **Cutoff Date/Time to be used for transfer set creation**. This frame allows you to set the initial cutoff date, and cutoff time to be utilized. After each successful sync with GoldSync, the GoldSync application will update this date, and time automatically to the date, and time of the last successful sync.

them from the site group. On the other hand, if this person will be remaining with your organization, and you are just removing a selected few records, then, yes, you would probably want to select this option.

Clicking on the **Next >** button moves you to the dialog screen shown in here as Figure 14-21. From here, one is allowed to override every single option that has been set for the Site Group, however, it will be for an individual as opposed to the Group.



Figure 14-21

Tip
David Lee says: The Territory Realignment Wizard in GoldMine will automatically create a deletion filter so, if you use the Wizard, you may not need to check the **Send Deletion-Filter for next session only** option.

The big difference between using the deletion filter rather than simply deleting the records on the Remote-side is that you can easily reestablish the records on that Remote-side if needed. If you delete them, a transaction log is created that prevents you from reestablishing the records, and also create a deletion transaction that could delete those records Server-side, depending on the Server-side Retrieval settings.

For this entire Group, I will utilize the Group Retrieval options. I am only after one thing with this override, and that is the ability to vary what the Server-side will send to each Remote-side. To do this I simply select the **Sending transfer sets settings** when then, in turn, selects all of the sub branches as shown in Figure 14-21 on the previous page. Nothing else is required for this particular override session, hence, I would ask you to click on the **Next >** button again to advance to the next dialog form shown here in Figure 14-22 as the **General Options** dialog form.

As you chose to override the Send options the **Send changed data to this site** option is automatically selected for you. Please note that the **Retrieve changed data from this site** is also selected yet it does appear to be disabled. In fact, it is not disabled, but as we have not selected to override the retrieve options GoldMine will default this remote to using the retrieval options established for the Site Group. The same holds true for the **Logging Options** frame of this dialog form.

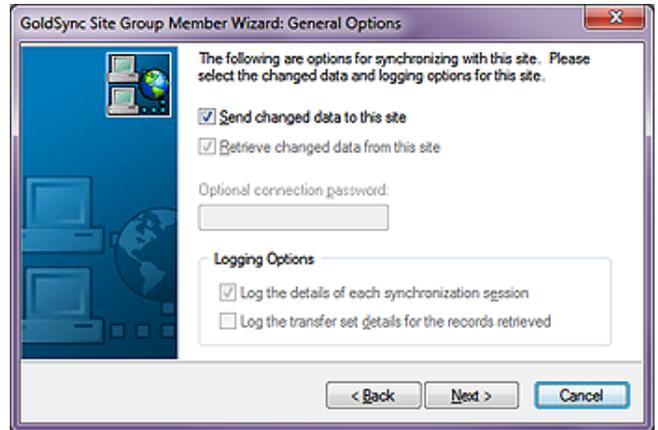


Figure 14-22

Click on the **Next >** button, and move on to the **Send Options** dialog form, Figure 14-23. Recognize this form? You should as it is the same dialog form that we discussed using Figure 14-11 earlier. On the override you may now select just those options that you wish to send to this remote only. Remember that you are overriding the Site Group Send Options for the individual user. In this case I have selected everything save the Logs. As there is no trouble to analyze as yet, there is no need to send the

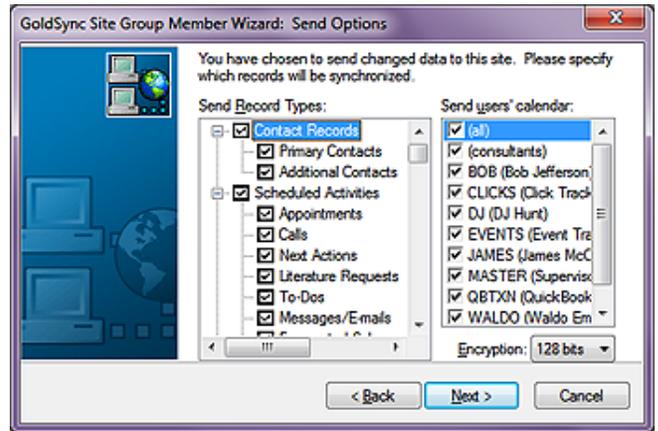


Figure 14-23

Server-side GoldMine Transaction Logs. For that matter, I never know of any reason to send the Server-side GoldMine Transaction Logs to the Remote-side. In cases of trouble, one might want to send the Remote-side GoldMine Transaction Logs to the Server-side for analysis, but I have yet to find a need for the reverse of that. Whereas, I always, yes always send **(all)** users' calendars.

Click on the **Next >** button, and move on to the **Send Contact-related Options** dialog form, Figure 14-24. And again this is the same dialog form as that which we discussed using Figure 14-12 earlier. In this case, we will just accept the defaults unless, against my advise, you had a separate Contact Dataset Set for each UserID at which point you would wish to select the appropriate dataset. We will handle the proper data to be synchronized on the next dialog form which is the **Send Filter Option**.

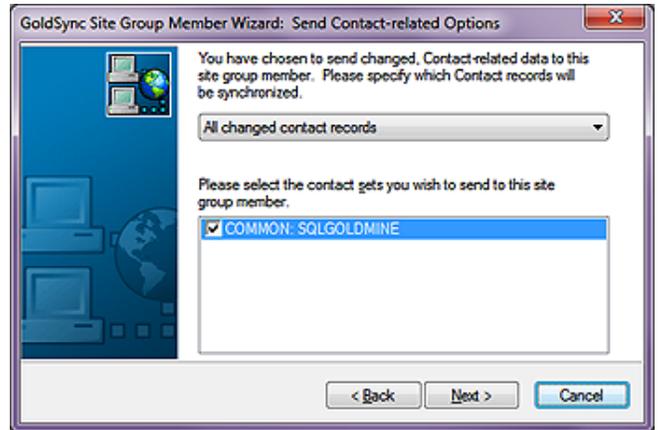


Figure 14-24

Click on the **Next >** button, and move on to the **Send Filter Options** dialog form, Figure 14-25 on the next page. And again, this is the same dialog form as that which we discussed using Figure 14-13

Tip

Name your Filters more meaningfully. For Instance: I probably should have named the Filter shown in Figure 14-25 something on the order of:

PDA Sync Filter for DJ

Note

I feel that the GoldMine One Button synchronization is too restrictive, to iffy and, therefore, I have no plans to cover its use in this book.

For Instance:

The size of the One-Button synchronization package may not currently exceed 2 Gigabytes.

Tip

Setting up the GoldSync Server is much more efficient if done while sitting at the GoldSync Server.

Note

Please note that it is not imperative that the GoldSync Server be running any Windows Server operating system. It could just as easily be, and usually is, an idle Workstation on the Network that has a fixed IP Address.



Figure 14-25

except click on the **Finish** button. Please do so if you have been following these procedures.

At this point you may or may not be asked: **You have configured an 'Undocked' site member, would you like to configure a 'One-button Sync Profile' for this remote site?**

One-button Sync Profile, hmmm! This might be the way to go on an initial installation, however, I have never really employed this feature nor advocated its use. A lot of resellers swear by it, and as many that love it there will be hating it. For this exercise, I am going to ask you to select the **No** button as I had said previously, I set my cutoff date back to 1/1/1980 in order to get all of the required records to my Remote-side users. In fact, in the next section I will explain how I might initially set up a Remote-side. As you may expect, the initial synchronization for each Remote-side location may take an extremely long time, however, subsequent synchronizations, if done daily, will only Send/Receive the deltas, hence, they should take only a minute or two when using the IP to IP synchronization method.

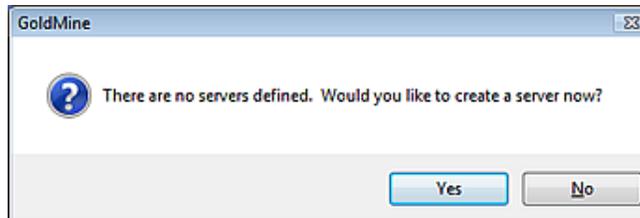


Figure 14-26

If you selected the **No** button, every time that you start the GoldSync Administration Center, this informational dialog form will pop up anew. I am using my GoldMine server as my GoldSync server as well, therefore, I am going to click on the **Yes** button. This action will start a new GoldSync Server Wizard from which I will configure my GoldSync Server, and you, your GoldSync Server.



Figure 14-27

instruct you. Click on the **Next >** button to advance to the next page of the Wizard as shown in Figure 14-28 on the next page.

earlier, however, different from the Site Group configuration, we will utilize a filter for this Remote-side override.

As this was an override for my personal UserID, and as I already had a synchronization filter established for myself, I simply selected that filter, **PDA Sync Filter**, from the list.

Click on the **Next >** button, and move on to the final dialog form which I have chosen not to depict here. What can I say about this dialog form? There is nothing for you to do

If you received that dialog form then clicking on the **No** button may bring up this next informational dialog form. If you are on the system that will serve as your GoldSync server, then I encourage you to select the **Yes** button here, otherwise select the **No** button. If you have selected the **No** button, every time that you start the GoldSync Administration Center, this informational dialog form will pop up anew.

Notice here in Figure 14-27, that the first page of the Wizard has automatically picked up the name of my server, which, as this is an example, happens to be my Workstation upon which I am typing this book (refer to sidebar Tip). This is why I asked you to be on the system that will be your GoldSync Server, although, you could have, as easily, just typed in the name of the server if it were different than the system on which you were working. I haven't had any issues running it this way, hence, this is the method by which I am choosing to

It is from this dialog form, that one may set up any or all of five different types of processes for GoldSync. The most common one, and the one that I have selected is **IP to IP/Network: Accept incoming remote connections**. This allows for the synchronization of GoldMine over the Internet or over the Network to the IP address of the GoldSync Server. This option causes GoldSync to sit there, and monitor, once started, the IP Address waiting for an incoming connection request from another, outside, IP address. As I said, this is, by far, the most common configuration for the GoldSync Server.

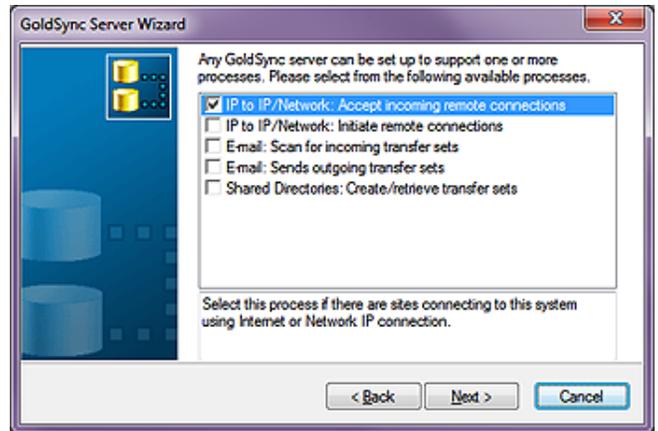


Figure 14-28

Tip

To keep synchronization time to a minimum, I highly recommend that your Remote-side users synchronize at least once each work day, if not more frequently.

The descriptors are relatively self-explanatory, however, I would like to discuss, in a little more detail, the 5th option, **Shared Directories: Create/Retrieve transfer sets**. This option will create, in advance of the actual synchronization by the Remote-side, a transfer set for the Remote-sides in shared directories. If you have users who sync infrequently, you may want to employ this option. If this option is employed, the user will not need to stay connected to the sync server, and wait for the sync server to build them a transfer set. They will just need to pick up a waiting transfer set after they have dropped theirs off. This option also works well when you have slow connectivity such as dial-up (does anyone still use dial-up?) Internet access.

At this point, I would ask you to only select the first option for now, and then click upon the **Next >** button which will bring one to a **GoldSync Server Wizard** dialog form where one can do little more than select **< Back** or **Finish**. Naturally, I would select **Finish** at this point.

That was rather painless now, wasn't it? You're already finished, or are you? Clicking on the **Finish** button on the last dialog form of the current Wizard will begin, yet another, Wizard. In this case the **GoldSync Process Wizard**, which, as you've already surmised, is display here in Figure 14-29.



Figure 14-29

You may change the **Process Name**: descriptor on this page, however, I usually just accept the default name, and click upon the **Next >** button. Doing so, will advance you to the dialog page shown in Figure 14-30.

Tip

David Lee says: Synchronization is very resource intensive. You should be sure that you have about 0.5 GB of RAM for every concurrent process. Thus, if you have 2 GB of RAM on your server, you should set the maximum number of concurrent processes at 4 for optimum throughput. Running too many concurrent processes with too little RAM could lock the processes. GoldSync does not give you a warning, it just stops working, and you will need to restart in order to recover after you have realized that you have the problem. This is based on testing by resellers in live environments, and not on FrontRange Systems recommendations.

There is little that one may do on this, Figure 14-30, dialog form page as well. Your first option is to set the maximum number of concurrent connections that this process will support (refer to sidebar Tip). The default is 5 connections, while you could have as many as 64 connections handled by this one server, the server would need to be a dedicated and powerful server to handle that many concurrent connections. I believe

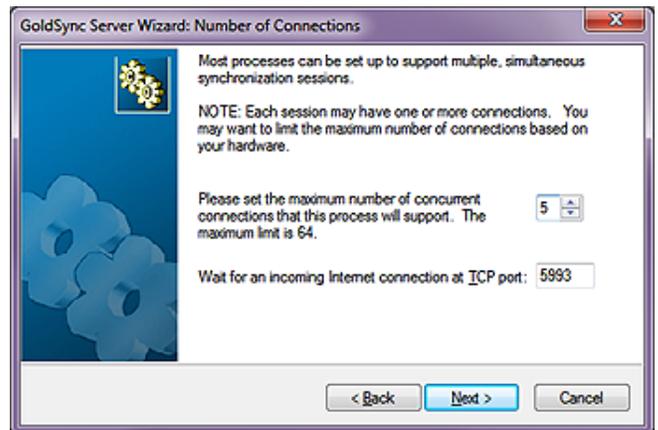


Figure 14-30

that FrontRange recommends no more the 10 concurrent connections per server as the performance optimum.

Whatever you want to set, let's just say that, for now, we accept the default of 5 concurrent connections, this is the maximum that can connect consecutively. If a 6th user attempts to connect, while there are 5 others connected, the 6th connection will be refused by the GoldSync Server. They will need to try again at a later time. This is a way to help prevent your server from running out of resources. Many people believe that if they have 10 people synchronizing, that they need to create 10 concurrent connections. This is false. You need to determine how many users are likely to synchronize at exactly the same time. Concurrent is definitely the key word here.

Unless you have an excellent reason to change the **ICP port**: from the default **5993**, I suggest that you do not. This is not a common port to begin with. Regardless of your selection, GoldSync will monitor the port set on the IP address for all connection requests.

Note
The combination of the IP address and the Port address is referred to as a socket. The socket might be:
192.156.254.27:5993

Note
The commandline for starting GoldSync via the Windows Task Scheduler is:
G:\GoldMine\GMW.exe /u:UserID /p:Password /s:GoldSync
Remember to leave a single space before each forward slash (/).

Note
Need a copy of **Close_GM.exe**?
Send an e-mail to:
DJ@DJHunt.US

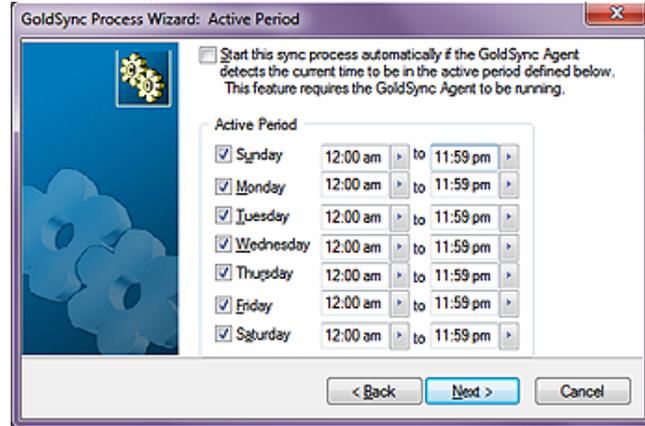


Figure 14-31

Clicking on the **Next >** button will bring you to the **Active Period** dialog form as is shown here in Figure 14-31. The **Start this sync process automatically...** is normally not selected by default, and it is my opinion that it probably should be selected by default. I always recommend selecting this option if you are establishing only a single GoldSync Server, after all, we do want GoldSync to be as automated as is possible. This means that, should anyone start GoldSync in the **Silent Mode** or as a **Service**, that this process would be

automatically started. Also, if you highlight this process in the **GoldSync Administration Center** when you are through, you will notice in the toolbar that there is an enabled **Start** button, and a disabled **Stop** button. You could click the **Start** button to this GoldSync Server immediately even while running GoldMine. This would be in lieu of running GoldSync as a separate instance in the **Silent** or **Service Mode**.

The **Active Period** frame is used to define when GoldSync will be active, and when it will not be active. To be honest, I leave this alone, and accept the defaults as I want the Remote-side users to have the ability to synchronize whenever they are connected to the Internet. I start GoldSync via the **Windows Task Scheduler**, and as well, I stop it via the **Windows Task Scheduler** using an application known as **Close_GM.exe**. However, if you are using the **GoldSync Service** feature, which I do not recommend at all, then I highly recommend that you do define specific active periods.

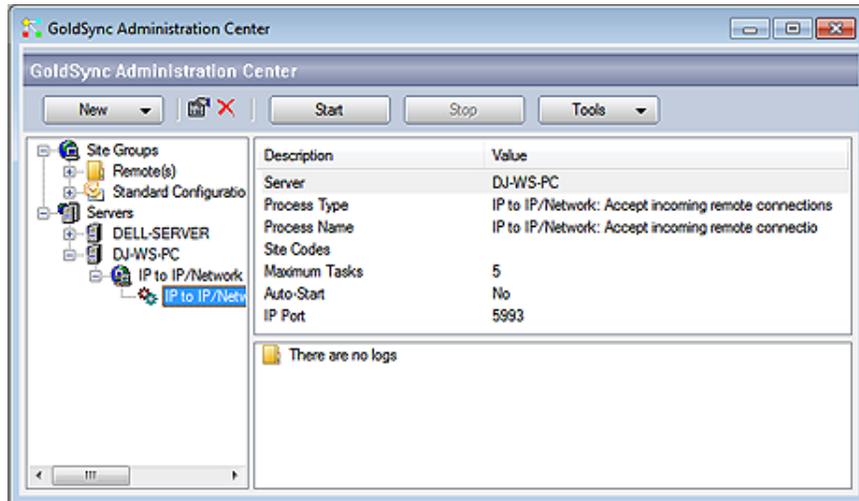


Figure 14-32

Clicking on the **Next >** button in Figure 14-32 will advance us to the **Finish** dialog form, and we are at that point again. Does **Finish** actually mean finish this time? Yes it does. Please click on the **Finish** button to complete this process once, and for all.

Initial Remote-side TSets

At this point, you should be returned to **GoldSync Administration Center**, and it should appear something like that shown on the previous page in Figure 14-32. From here, you may **Clone...** additional sites, create a **New Site Group**, create a **New Site**, create a **New Server**, create a **New Process**, or you may **Create Installation File for One-button Sync...**, which, as you remember, I passed on before. There are many other activities that you may work on within the GoldSync Administration Center, but we do need to move on.

At this point in my writing, I am going to deviate from my previous book outlines to add this new section called **Initial Remote-side TSets**, and this is to answer that question: "Well, if you don't recommend One-Button Synchronization then just how do you set up a new Remote-side user?" So here you go.

Step 1:

- I create an Undocked User License for the Remote-side, and I copy that to a Notepad document.
- I create their Sync Site from the GoldSync Server or a Workstation, and don't forget to include any Synchronization Filter if you are not sending the entire GoldMine dataset.
- From the GoldSync Server or a Workstation I create TSet of just the Customizations in the Server GoldMine:

Tools Synchronize ► Synchronization Wizard...



Figure 14-33a



Figure 14-33b

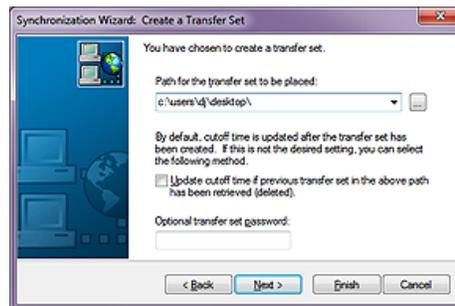


Figure 14-33c



Figure 14-33d

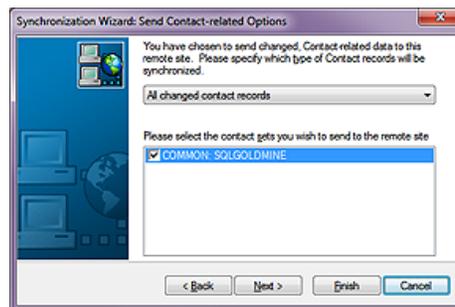


Figure 14-33e



Figure 14-33f

You may not have noticed, however, in Figure 14-33d I first right-clicked over the **Send users' calendar**; and selected **Clear All**. I then right-clicked over the **Send Record Types**: tree, and selected to **Clear All** there as well. Lastly, I scrolled down to the **Customizations** group, and simply checked that option. That is all that was selected in Figure 14-33d even though you can't see the entire Tree in the image.

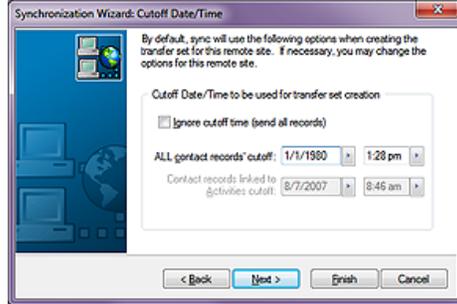


Figure 14-33g



Figure 14-33h

You may have noticed, Figure 14-33g, that I changed the **All contact records' cutoff**: to **1/1/1980**. This is a date before the existence of GoldMine on this earth.

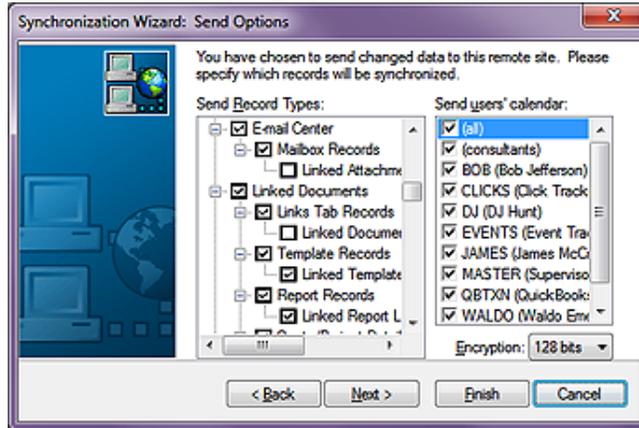


Figure 14-34

From the GoldSync Server or a Workstation I create TSet one more time only this time I want to forgo the Customizations and any Linked Attachments, see Figure 14-34. If this Remote-side is not to get the entire GoldMine database then now would be a good time to implement a Filtered Set for this Remote-side Transfer Set. Also, make certain that the cutoff date is set to **1/1/1980**.

Next, I would zip up the Folders of Linked Documents (there's no sense in trying to include those in your TSet).

Let's create the bundle now for this Remote-side. In a downloadable location include:

- Notepad document containing Undocked License Number
- Customizations Transfer Set
- All/Filtered Records Transfer Set
- Zipped file containing Linked Documents
- GMSsetup.exe equivalent to Server-side GoldMine Build
- Appropriate SQL Server 2008 Setup files

Server-side, I think that would be everything. Let's move to the Remote-side for this Site Group.

Download all of the files to the Remote-side Desktop from the ftp site.

Let's begin by installing SQL Server 2008. Make sure that you install SQL Server 2008 using the **Mixed Mode** authentication when you arrived at that dialog form in the Wizard. Personally, although I hear that it is not a good practice, I assign the **sa** login the same password as I have utilized on the Server as there is less chance of their forgetting it. However, Computerese Inc always assigns a back door login with Administrative Rights immediately after the installation process has completed for SQL Server. We always assign the **Login: GMUser** with our own common password. We do this knowing fully well that the client will eventually forget their sa login password.

In the next step what we want to accomplish is to install the latest build of GoldMine Premium. Refer to sidebar WARNING before proceeding. It is essential that you maintain the structural integrity of the path to preserve your capability to successfully synchronize documents to and fro the Sever-side and the Remote-side. At the very beginning of this chapter I talked about the GoldSync.ini, and this is a critical action to facilitate document synchronization as employed via the GoldSync.ini.

This may need to be part of the last step, however, open the Notepad document containing the Undocked or Site License, and **Copy** the license number to the **Clipboard**. If GoldMine did not start automatically, it probably did, then start it now. The first thing that you should be asked for is the license number. Simply click the button to **Paste License** (I'm not positive of exactly what the button caption is without doing a new installation this moment) number.

WARNING

There is one and only one structural location for the install of GoldMine on the Remote-side. Structurally, the resulting path must be:

<Drive Letter>:\GoldMine

So I really don't care if the resulting path is:

*C:\GoldMine
D:\GoldMine
G:\GoldMine*

as long as you maintain that structural paradigm.

□ Before we do anything else, and while we are in GoldMine, we would like to establish out GoldSync.ini settings. These should be exactly as described at the beginning of the chapter. From the GoldMine menu:

- Tools
- Synchronize ►
- Synchronization Settings...

You know what, it is such a critical step that I am going to Copy & Paste that paragraph here so that you don't have to flip back and forth:

If you followed my tip, then the next option is where one would establish a rule that will compensate for the drive letter differences in between the Server-side path and the Remote-side path. For Instance; your Remote-side might save a linked document in: **C:\GoldMine\Documents**, while the comparable path on the Server-side might be: **Y:\GoldMine\Documents**. Since the file's original path, including drive letter, does not exist on the server, it is important that one suggests other possible drive letters. As I never recommend using UNC paths, \\Server\C\, I do not suggest that you incorporate any of these in this rule. All of the optional drives to be searched should be separated with a semicolon (;). Based upon my For Instance, I would want to include **Y** in this space on the Server-side configuration, while I would have used a **C** on the Remote-side configuration.

□ Okay, we're moving forward. Next, using the Synchronization Wizard:

- Tools
- Synchronize ►
- Synchronization Wizard...

We want to retrieve that **Customization Transfer Set**. I won't supply you the steps for that as it is a Wizard, and very straight forward.

□ Can you imagine what our next step would be? Of course you can. Using the Synchronization Wizard, I want you to now retrieve the **All/Filtered Records Transfer Set**.

□ Lastly, for these steps at least, I want you to unzip the file containing the Linked Documents, and unzip them to the exact same path from whence they came off of the server except that the drive letter should have changed.

And with that, your Remote-side should now be established properly. You have one more task to accomplish, which is to set up and do an actual Synchronization test to/from the Server-side. Before I can proceed with that section, however, I must talk about the IP Address.

Note

It is very conceivable that you may have utilized a different drive letter for your Remote-side installation. Were I have entered a C, you will wish to enter the drive letter under which you have the Remote-side GoldMine installed. Again, refer back to my WARNING on the previous page governing this matter.

Note

As an administrator, you may want to do due diligence and establish a Maintenance Plan for the Remote-side to execute via the SQL Management Tools at this point. And training the Remote-side how to utilize or monitor the process depending on whether you establish a Manual or Automatic process.

IP Address

Note

Please make a mental note that I have assigned port 192.168.1.130 permanently to the GoldSync Server so that I will not have to constantly keep reconfiguring my Router Port Mapping each time the computers reboot.

Note

Whether inside or outside the network, the Remote-side users must have full rights to the GoldSync Server as they will be Reading/Writing/Deleting from this server via the GoldSync application.

Note

The combination of the IP address and the Port address is referred to as a Socket.

The socket might be:

192.156.254.27:5993

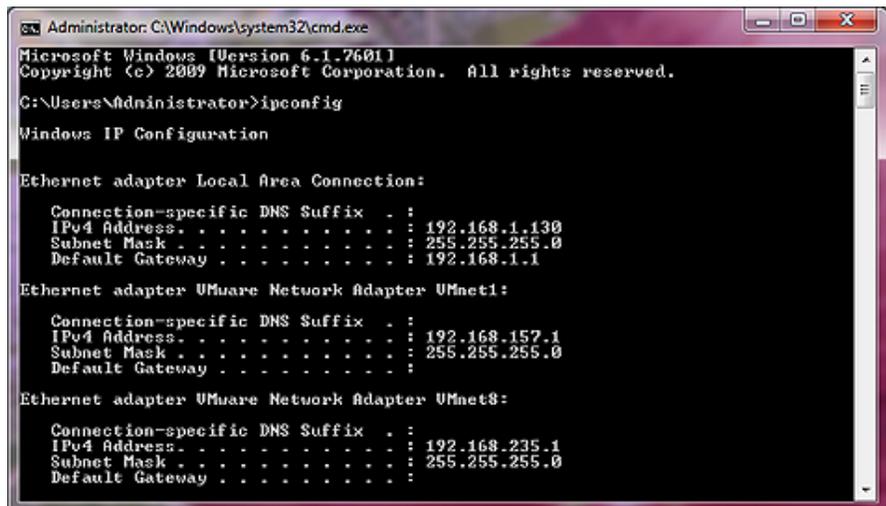


Figure 14-35

I want to comment on the **IP Address** that GoldSync is monitoring on the Server. When the Remote-sides synchronize to GoldSync using this process, they will be designating the IP Address, and the Port (Socket), to which they intend to synchronize. Finding the IP Address of the GoldSync server is easy. Go to **Start | Run....**, enter **Cmd** (older Windows versions use Command), then click the **OK** button. This will bring you into the DOS command window with a blinking cursor. If you enter **IPConfig** from your keyboard, and hit the **Enter** key, the display, similar to that shown in Figure 14-35, should result.

This depicts the internal IP Address for this system on this network. The first IP address, **192.168.1.130**, is of significance to us, and is the IP address of my GoldSync Server. Of course, I am using the default Port of **5993** when synchronizing my Remote-sides. This, then, is the IP Address that the Remote-side would use in their configuration when, and only when, they are con-

Note

My current Firewall Socket for GoldSync is:

74.104.173.223:5993

However, that is a moving target as it is a dynamic IP Address. To stabilize the IP Address, at no cost I might add, I utilize a service from www.No-IP.com called **No-IP Free**.

GoldSync Remote-side

ected to the network either in-house or via a **Virtual Private Network (VPN)**. This is the socket that GoldSync will be monitoring for connection requests.

When the Remote-sides are outside of my network, they must synchronize to the firewall IP Address on Port 5993, and the firewall must handle the redirection (**Port Mapping**) to the GoldSync Server IP Address which, as we already know, is 192.168.1.130. Because of the vast number of firewalls, and software, it is beyond the scope of this book to attempt to help you configure your firewall. Your Network Administrator should be familiar with this process, and should be able to assist you. Your Network Administrator must also assure that the Remote-side users have full rights on the GoldSync Server.

We have now positioned ourself in this process to establish a **Profile**, and synchronize any **Remote-side** user that has been established on the **Server-side** as a **Site**. For this section, I will assume that this Remote-side is connected to your internal network, and that they will be synchronizing across this network to a previously designated internal IP address. Additionally, I will be working exclusively on the Remote-sides system at this point. I will assume that the GoldSync Server is up and waiting for a remote connection request.

Obviously, I would want to make certain that the Remote-side can see the Server-side. Therefore, after establishing my network connectivity, I would ask you to bring up the DOS Command window on the Remote-side as we had done previously on the Server-side. This time, however, at the command prompt, I would like you to **Ping** the IP address of the GoldSync Server. That's right, an old Navy term to see if a response is returned by the pingee.

At the command prompt, I would like you to type (IP address of your GoldSync Server):

Ping 192.168.1.130

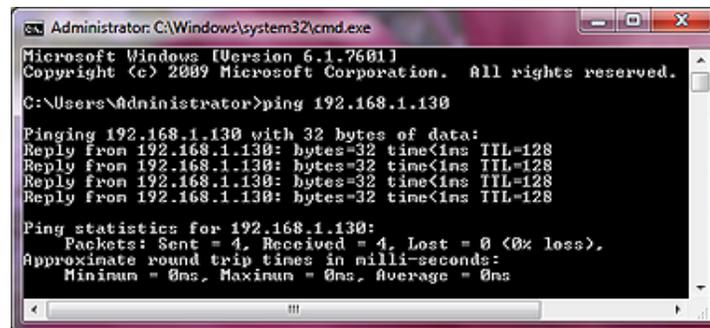


Figure 14-36

You would expect your results to resemble those shown here in Figure 14-36. If your screen looks similar to that shown here in Figure 14-37, then you do have a communication issue. Notice the **Destination host unreachable** at the end of each Reply statement, whereas, Figure 14-36 shows that we have received a Reply from 192.168.1.130, our pinged site. If you can't achieve the state shown in Figure 14-36 while using this Remote-side, then this Remote-side will never, ever be able to synchronize with your GoldSync Server.

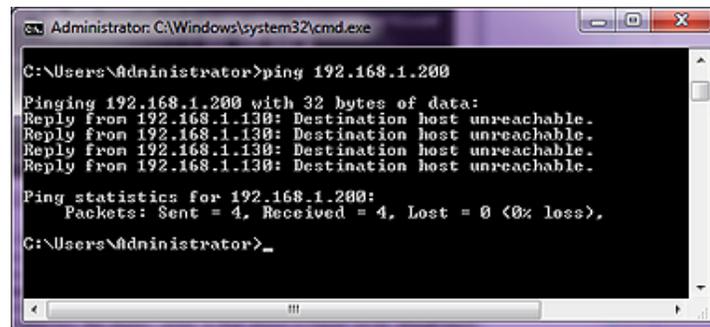


Figure 14-37

This is a critical point that a lot of new installations tend to overlook. If you can't see the GoldSync Server, then the GoldSync Server can't talk to you. The Remote-side may receive a **10060** or a **10061** error message, communication failure if this is the case. Often the Remote-side will believe that they have been synchronizing successfully, because they see the flurry of activity prior to their unit attempting to communicate with the GoldSync Server. Often the error message goes unnoticed by the Remote-side user, and they adamantly claim that they have synchronized their data. If so, why isn't it on the Server-side? Hence, we have the GoldSync Logs. These logs will give the GoldMine Administrator a way of ascertaining whether the user is telling the truth, or the user is, well, how do I put this, a normal end user.

To continue, I will assume that you have already done the initial setup of the Remote-side users system as described earlier. Pretty much now, all that is left for us to do is to set up the Profile for the Remote-side, and perform an internal test synchronization.

WARNING

If you cannot Ping the GoldSync server from the Remote-side, then the Remote-side will never be able to synchronize with the Server-side.

Period. The end.

You can begin setting up the Remote-side synchronization process by proceeding to:

Tools
Synchronize ►
Synchronization Wizard...

This is found on the GoldMine menu on the Remote-side. This will begin the Wizard as shown here in Figure 14-38.

I will use the **Start a new session** option which is the default when on a new GoldMine installation, and then I would ask you to click on the **Next >** button to advance to this page of the GoldMine Synchronization Wizard as shown in Figure 14-39.



Figure 14-38

As this is the Remote-side, I will select to **Connect to remote**. You say "Huh? The Remote-side shouldn't be connect to the remote?". It is just a matter of semantics. Yes, the Remote-side wishes to connect to the remote GoldSync Server, which is, in fact, remote to this system (see sidebar Tip).

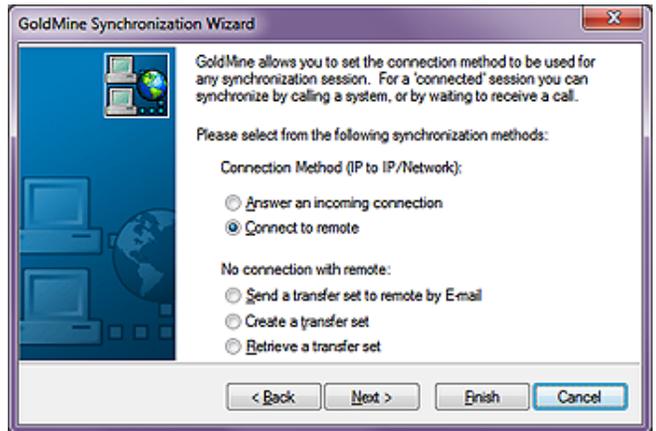


Figure 14-39

It should be obvious that you need to use one of the **Connection Method (IP to IP/Network)**: options, just as it should be obvious that you cannot have both the Server-side, and the Remote-side waiting to **Answer an incoming connection**. One has to be waiting for an incoming connection request, Server-side, while the other has to be requesting the connection, Remote-side.

Click on the **Next >** button to advance the Wizard.

This brings us to the **Connect/Send E-mail to Remote** page of the Wizard, Figure 14-40. Forget about the semantics. I would ask you to select, if they are not already selected, **Send changed data to remote**, and **Retrieve changed data from remote**. Remember it is the intention of this chapter to synchronize all changes to/from the Server-side.

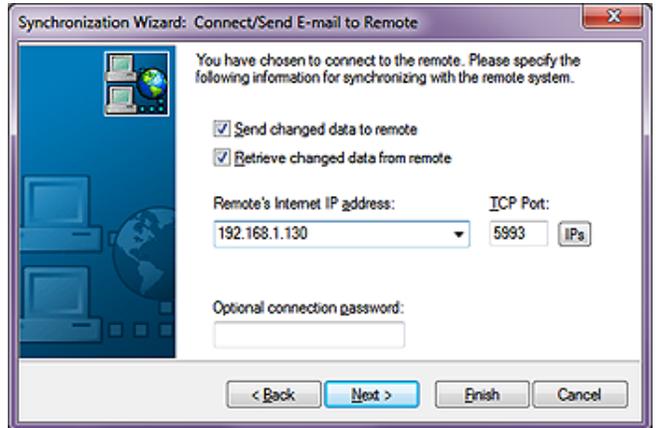


Figure 14-40

I would also ask you to remember that I am connected to the internal network for this exercise, and, previously, I asked you to find out, and test the internal IP address of the GoldSync Server. I ask you now to enter the IP address, successfully tested in Figure 14-36, into the **Remote's Internet IP address**: field. You could just as easily entered **DJHunt.No-IP.biz** which is not an internal IP address, but my No-IP static IP Address for connecting when one is on the road. I just want to show you that if you don't have the money for a fixed Router

Note

*Remember what I said about remembering your seating position. You are setting up a Remote-side, so even though the GoldMine Wizard option is saying **Connect to remote**, the remote that GoldMine is eluding to, in this case, is the Server-side as it is remote to this unit.*

Remember where you are sitting when you are running the GoldMine Synchronization Wizard.

WARNING

It is critical to the proper GoldSync operation that the TCP Port Server-side and Remote-side match exactly or you will receive a 10060 or 10061 connectivity error.

Tip

*Even though I have asked you to **Select All**, you may want to consider turning off (unchecking) the **Logs**. These can grow abnormally large when not Purged Daily, and are not necessary to send from the Remote-side unless you are experiencing issues with synchronization that you wish to analyze.*

Tip

*I only advocate the use of a single contact dataset except in rare cases, and those rare cases usually do not have to be synchronized out to the Remote-side. In Figure 14-42, you will notice that I have one dataset. It is named **COMMON: SQLGOLDMINE**.*

Note

*As of GoldMine 6, all datasets must have a **File Code**, otherwise you will not be allowed to set up a synchronization profile. Each File Code must be unique. You may have noticed, Figure 14-42, that I used **COMMON** as my File Code. It doesn't matter what you use as long as each is unique and within the fields character limitation. Personally, I prefer something that is descriptive of the dataset. You should be aware that I have the identical configurations Server-side, and Remote-side.*

Note

***Send Filters** are more apt to be used under the Server-side **Send Filter Options** than they are here on the Remote-side.*

IP address, as I do not, that there are free ways around this problem. Go to www.No-IP.com, and pick up a free No-IP redirection account which will emulate having a fixed IP Address. Oh, and don't forget to download DUC.exe as this is what broadcasts your dynamic IP Address back to No-IP for the emulation process.

As long as you made no changes to the **TCP Port**: on the Server-side, I would ask you to accept the default port of **5993**.

As I did not add a connection password while setting up the Server-side, I will not add the **Optional connection password**: on the Remote-side. Personally, the transfer set is encrypted, and having a password seems redundant, although, when employees leave the company, I suppose this could be a good thing to prevent them from continually synchronizing. Then again, that would be redundant with the use of a Deletion Filter. I don't know. Six of one, and a half dozen of the other. You decide what is the best for your situation.

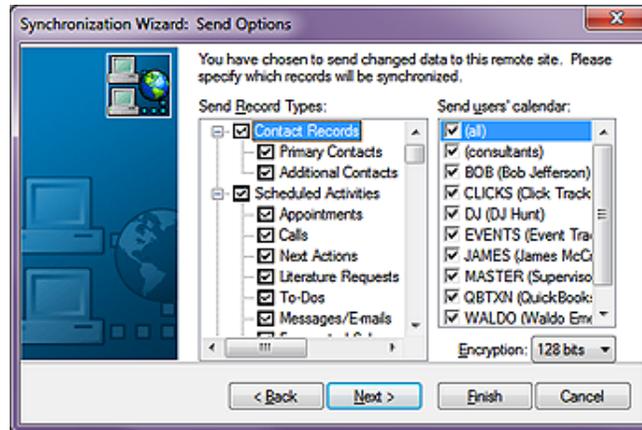


Figure 14-41

Click on the **Next >** button to advance the Wizard to the **Send Options** page, Figure 14-41. For this dialog form I, again, ask that you right-click on the **Send Record Types**: list, and choose **Select All** from the local menu. I also ask that you check the **(all)** box in the **Send users' calendar**: list.

If you did not change the **Encryption**: on the Server-side, then do not change it here, and you may click on the **Next >** button to advance to the **Send Contact-related Options** page of the Wizard shown in Figure 14-42.

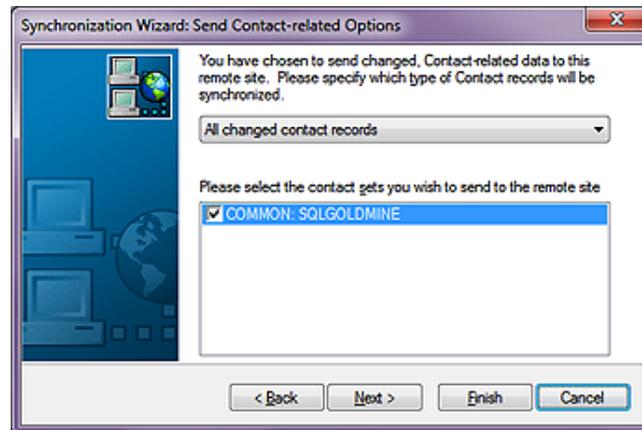


Figure 14-42

The first selection is a drop list containing four possible selections:

- Only the current contact record
- All changed contact records
- Contact records linked to the 'Send user's calendar' list
- All filtered records and user scheduled activities' records

As you can easily see, I selected the second item, All changed contact records.

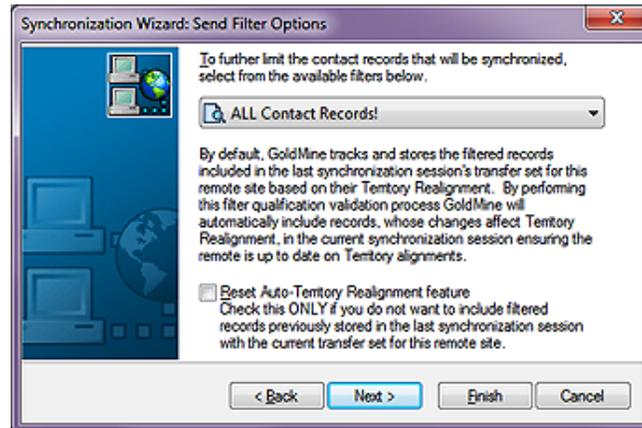


Figure 14-43

One is allowed to synchronize more than one dataset, and, as of GoldMine 6, you are required to use unique **File Codes** for each of your datasets created. For this exercise I will only be synchronizing the one dataset, hence I have checked my primary dataset **COMMON: SQLGOLDMINE**.

I then ask you to click on the **Next >** button to advance to the **Send Filter Options** page of the Wizard, Figure 14-43. This is the Remote-

side (always remember where you are sitting when you create your profiles), therefore, I would want them to send everything that they have done back to the Server-side. The Server-side can then pick, and choose from the transfer set that which it wishes to retrieve. You may choose, as I have, **All changed contact records**, or you may choose from any of the available filters.

There is no longer an Options button as you may remember from previous builds of GoldMine.

The last option on the Send Filter Options dialog form, Figure 14-43, is to check, or not, **Reset Auto-Territory Realignment feature**. On the Remote-side, I have never had the need to select this option.

I now click on the **Next >** button to proceed to the **Cutoff Date/Time** dialog form of the Wizard, Figure 14-44. As this is a new installation of GoldMine on the Remote-side, and this is my first synchronization with the Server-side, I really don't need to send anything from the Remote-side to the Server-side. You must constantly position yourself mentally at the unit which you are setting up. I am setting up the Remote-side Send options, the converse of which is the Server-side Retrieve options. I will, therefore, accept the defaults on this page, and advance to the next page of the Wizard by, again, clicking on the **Next >** button.

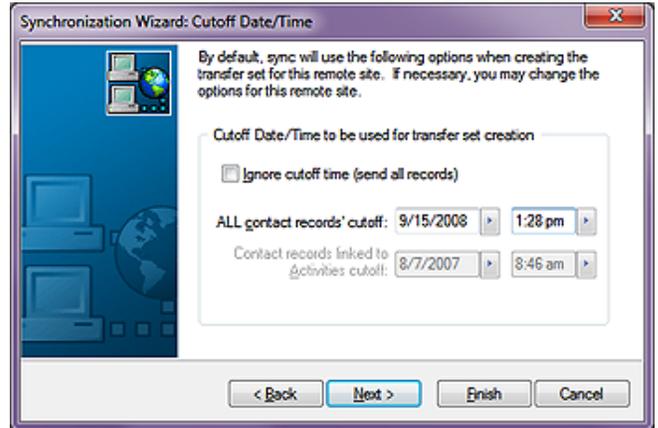


Figure 14-44

I am now ready to begin with the **Retrieve Options**, Figure 14-45. In most cases I would expect that the Remote-side will want to retrieve everything that the Server-side has sent to it. I simply right-click individually in both trees, and choose **Select All** from the local menu on both list. I will usually then uncheck any **Logs** on the **Retrieve record types**: side.

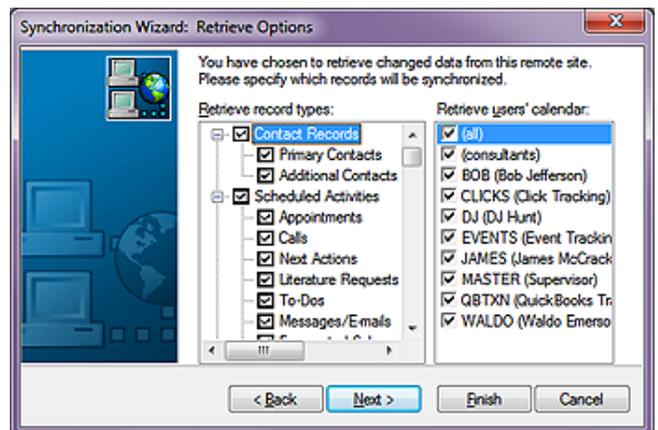


Figure 14-45

Clicking on the **Next >** button brings one to the **Retrieve Contact Sets** dialog form of the Wizard, Figure 14-46. You must have a contact set chosen under Default contact set, if the incoming contact set is not specified, and, as implied, you do not have to check a dataset. If, however, you are synchronizing more than one dataset, then you must select those datasets that you wish to retrieve from the Server-side. Simply said, select all of the datasets that you wish the Remote-side to accept (retrieve) from the Server-side, and then click on the **Next >** button.

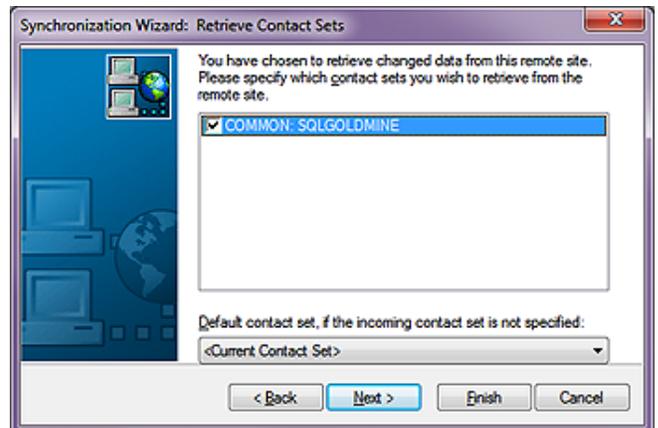


Figure 14-46

This brings us to the **Connect/Send E-mail to Remote** page of the Wizard, Figure 14-47 as shown on the next page. From this dialog screen I would select when to connect. The default is **Immediately** which I have accepted.

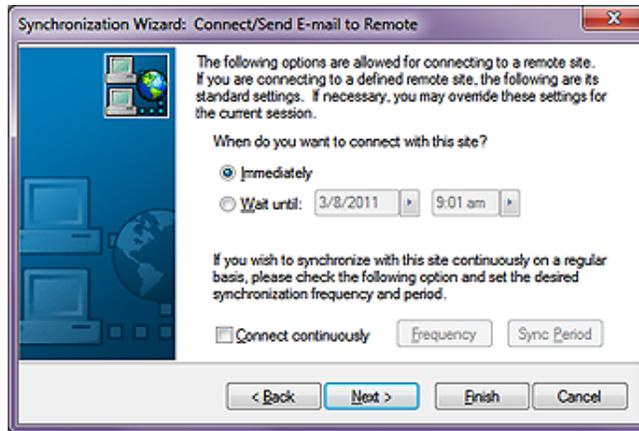


Figure 14-47

If your Remote-side users are connected to the network, even if they are not, you may want to select the option for them to **Connect continuously** which, in the default state, is not selected. As you can see, once selected, you may set a **Frequency**, as well as a **Sync Period**. The frequency can be set in days, hours, and/or minutes. The sync period is the setting of the hour ranges on Sunday thru Saturday when the Remote-side should be trying to connect to the Server-side. I don't ever recommend this option, and believe that it should be controlled Server-side. I would, therefore, not select this option at all. I would remain with the default connection method of immediately, and I would click on the **Next >** button to advance to the next dialog page of the Wizard.

I would like to mention the **Wait until:** option. Obviously, this will allow GoldMine to wait until the specified date and time couple prior to connecting to the Server-side if, and this is an important if, this instance of GoldMine is actually running on the specified date, and time couple. Personally, I have never had the opportunity to avail myself or any of my clients of this feature, but it is there should you have a need for such an option in your particular situation.

If your Remote-side users are connected to the network, even if they are not, you may want to select the option for them to **Connect continuously** which, in the default state, is not selected. As you can see, once selected, you may set a **Frequency**, as well as a **Sync Period**. The frequency can be set in days, hours, and/or minutes. The sync period is the setting of the hour ranges on Sunday thru Saturday when the Remote-side should be trying to connect to the Server-side. I don't ever recommend this option, and believe that it should be controlled Server-side. I would, therefore, not select this option at all. I would remain with the default connection method of immediately, and I would click on the **Next >** button to advance to the next dialog page of the Wizard.

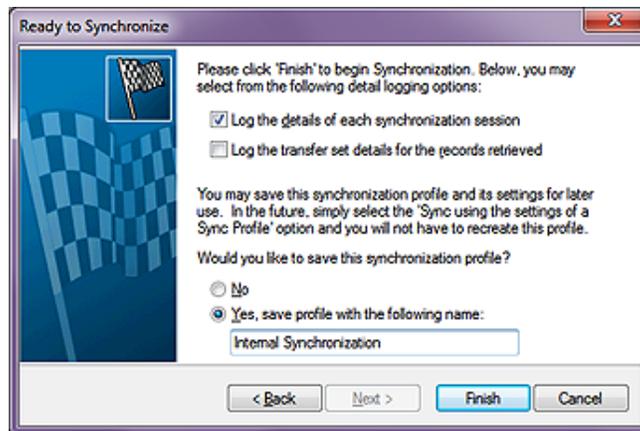


Figure 14-48

time being however, I would like to make sure that everything is running smoothly, and the logs will validate that for me. I can do this from Server-side by reviewing the logs on the Remote-side if they have been saved. For a while, I would leave this option selected.

Yes, you have reached the final page of the Remote-side wizard, and you are now **Ready to Synchronize**, Figure 14-48, when you click on its **Finish** button.

As this is the first time that the Remote-side would be synchronizing with the Server-side, however, I would like to make some changes to this page. You will notice that I have selected to **Log the details of each synchronization session**. After I am sure that things are running as expected, I may wish to deselect this option. For the

As I am setting up the Remote-side (remember where you're sitting), I would also want to save this synchronization profile for their later usage. I chose to save this as **Internal Synchronization** as I am syncing while connected to the network inside the firewall. You may want to set up two of these profiles. If you now have the Remote-side connected to the internal network for this initial synchronization, then you may want to set up one profile to Internal Synchronization, and another to Remote Synchronization. The second would be for when they are syncing from the road (outside the firewall), and will need to use a different IP address.

Once this dialog form is completed, a simple click on the **Finish** button will save the profile, and then proceed to perform the first synchronization. However, make certain that the Server-side is **Listening for incoming IP connection (x connections...)** before you click on the **Finish** button on the Remote-side.

Watch the process monitor. It will process the Remote-side first, and then attempt to connect to the Server-side. This is where the error will most likely occur if it is going to. You may see a **10060** or a **10061** connectivity error if the Remote-side cannot see the server-side IP address, or the if the Server-side is not set to Listening for incoming IP connection (x connections...). This is the activity that few Remote-sides catch. They see the processing on their side working just fine, yet they fail to see the connection error and they say "Yes I've synced to the server just fine." when, in fact, they did not.

Note
Logs are continuously being appended to with new records. Contrary to FrontRanges recommendations, I recommend that you **Purge Logs** after successfully synchronizing. The default setting is to save logs for one month, and I recommend that you accept that setting.

Remember, logs should be purged Server-side and Remote-side on a regular basis.

Note
After a synchronization has been run once, and the profile saved, the next running of an unchanged profile is even easier.

All that you, or the user needs to do is:

Alt - T
Enter
S
S
Alt - P
Tab
Up/Down arrow to desired profile
Alt - F

These also represent the key strokes for creating the keyboard macro. So why not create one?

You should be advised that the addition of a new Synchronization Profile after the creation of the macro could break the macro.

Whitepaper

Note

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This whitepaper was written by David Lee, and with his permission is duplicated here for your edification unaltered..

After you have completed your synchronization with the Server-side from the Remote-side, I recommend that you create two keyboard macros to run each of the synchronization profiles. One button for synchronizing while on the network, and the other for synchronizing while connected via the Internet. I recommend that you then add these macros to the Taskbar for this UserID. Test out both of the buttons to make sure that they work properly, and that should be it.

I hope that your Remote-side has synchronized successfully to your Server-side, however, even though GoldMine is one of the best products for synchronizing, the synchronization can be bad or fail for many reasons. David Lee is allowing me to reprint his whitepaper on this subject, which I originally published in The GoldMine Advisor newsletter.

GoldSync Problems

How does GoldMine sync work compared to other systems?

The major CRM systems have each found its own way to synchronize data. None of them are perfect, and all of them will lose data in some situations. Despite this, the value of being able to synchronize remote systems, and work offline is so great that virtually every major CRM system provides this option (including web based ASP systems). You would like to find a system that loses data rarely, that allows you to find out whether or not you have lost data, and that gives you a good way to recover the data.

Some systems, such as SalesLogix, dynamically build transfer sets as you enter data. This is an effective approach when you have a very small number of syncers. However, it is very slow if you have large numbers or if there are problems which require you to rebuild your transfer sets.

Other systems, such as Microsoft CRM, track changes and force an update when you dock and undock from the system. This gives you little or no ability to correct sync errors or reset your sync. In Microsoft's case, it also lacks sophisticated conflict resolution rules. What do you do if two people updated the same field, and then you Sync the systems?

GoldMine builds the transfer sets when you ask for them to or it pre-builds them on a schedule. The building process is resource-intensive, but it can support a very large number of users without degrading system performance. GoldMine also has a sophisticated conflict resolution capability (the most recent change wins with proper adjustments made for users in different time zones). In addition, GoldMine creates transaction logs (Tlogs) to track who made changes, when they were made, what was changed, and when the change was synchronized. This ability to create transfer sets at any time gives GoldMine great flexibility, and scalability compared to other systems.

It also creates many vulnerabilities as discussed in this white paper.

Why is it better? Why is it worse?

■ Advantages of GoldSync

- Scalable to large numbers of users
- Supports many topologies, and methodologies
- Very flexible in determining what will, and will not sync
- 1-button sync feature reduces users' ability to introduce errors
- Easy (compared to other systems) to run a "catch up" sync when there are problems
- Good conflict resolution algorithm
- Supports territory realignment
- Allows single record synchronization (for example, you can sync a single record to quickly transfer an account to another person)
- Allows lateral synchronization (synchronization between users as well as synchronization with a master database). This adds great flexibility, and power.

■ Disadvantages of GoldSync

- Difficult to set up
- Users can introduce errors
- Difficult to diagnose errors (this is common to most synchronization algorithms, not just GoldMine)
- Transaction logs add significant complexity to resolving certain classes of problems

- Conflict resolution is not perfect. There is no ability to configure a rule, for example, that a manager's changes will override a sales rep's changes.
- Does not have the concept of "inherited rights," in which a manager can elect to receive any data that his subordinate can receive during sync.
- Allows lateral synchronization (synchronization between users as well as synchronization with a master database). This provides additional opportunities for user errors.

How do I detect sync problems?

One of the problems with synchronization is that it is often difficult to detect problems. How do you know that you did not receive a particular transaction or update? You may want to run a monthly report (using a reporting tool, a SQL query, or other method) to compare summary data from all GoldMine systems. If the totals do not balance, this might indicate sync problems.

- Use the GoldMine Statistical Analysis to compare summary data between different GoldMine databases.
- SQL queries, sync logs (if activated), and e-mail alerting tools can help determine if there are potential problems. For example, you can develop a series of SQL queries to let you compare summary data between GoldMine databases.
- Also, Sync Spy (Tools|Sync Spy) can tell you when, and by whom records were last modified right down to the FIELD level.
- Observation: Users report missing or inconsistent data. In practice, this is by far the most common way that sync problems are discovered.

How do sync problems happen?

■ Errors in sync filters

- The sync filter may have been set up incorrectly. Some filters are quite complex, and can have faulty logic.
- The logic of the filter may correctly reflect the original specification, but the specification may not give the intended result (for example, I want to sync only records "owned" by a sales rep, but I forgot to sync records common to the whole team. Therefore, the rep feels that he is missing records. He can sync up a team record that he creates, but never gets updates from the sync server. He views this as a sync error.).
- User-introduced sync filter errors. Sometimes users click into the sync area just to see what is going on. They may change a setting or actually load a different filter accidentally.

■ Errors in sync settings

- In addition to filters, there are many other settings governing what data is sent, and what data is accepted during a sync.
- Some settings may have been made in error (for example, settings that prevent syncing all calendar records when the actual intention was to prevent syncing calendar records that do not belong to the user but to allow syncing records that do belong to the user).
- Some settings may have been changed by users who are "Browsing" through the sync settings.
- It may be difficult to identify these changes, especially if they have been corrected by the time the GoldSync engineer starts to investigate the cause of sync problems.

■ Inappropriate Record Settings

- You can mark individual documents, and records to NOT sync. This is very valuable when the documents are personal, or when very large documents would require excessive transmission times. However, users may forget that they flagged the document or transaction not to sync, and then view the failure to sync as an error.
- GoldMine has a calendar "rollover" feature to automatically forward old, uncompleted activities to the current day. The rollover could involve large numbers of transactions, and there is an option to flag them as a group to not sync. Again, a user could forget that he made this setting, and view the failure to sync as an error.

■ Misunderstanding how deletions sync (delete filters vs. deletion logs).

- When you delete a record, you create a transaction log entry. This entry synchronizes, and causes deletion of the record in the synchronizing computers. The record can never be restored as long as the log exists.

- When you create a deletion filter or a territory realignment, there is a different type of deletion record. It does not remove data from computers other than the target computer, and it does allow records to be restored.
- If you move a record from to another file (such as an archival file), it creates the second type of record. This will not cause the record to be deleted from other systems during sync. This may be incorrectly viewed as an “error” by some users.
- If you want the record deleted from a target computer but not from other computers (such as in a territory realignment), you must create something called a “deletion filter”.
- A user may reassign a record to another user by changing the record owner field or by updating a sales rep field. If his own sync filter does not allow him to see records with the new setting, he will no longer get updates for those records. Moreover, if nobody creates a deletion filter for him, the record will not be removed from his computer. Finally if he gets frustrated, and deletes his record, he might delete the record everywhere in the system. All of these could be viewed as sync errors, but, in fact, all can be addressed by proper sync design, and sync settings (such as not accepting deletions from the main sync server).

■ Using the wrong default sync settings (not restoring the default)

- GoldMine allows many synchronization options. For example, it is the only major CRM system that allows two users to sync to one another, and at the same time sync to a primary sync server. Each sync configuration that a user defines can be saved as a “sync profile”, and a user can have as many such profiles as he desires.
- The default profile is always the last one that was used. If a user selects or defines a new profile for a 1-time use or just because he is browsing around the system, that will become the default.
- If the user does not remember to restore the original default, all future syncs (until he realizes the problem, and restores the correct profile) will produce an unplanned result. For example, he may build a new sync file (called a Transfer Set) over, and over without actually completing a synchronization. If he realizes his mistake, and restores the original settings, it will be difficult for the GoldSync engineer to identify the cause of the problem.

■ Database / index corruption

- Many laptop systems (and some network systems) use the dBase database structure rather than MS SQL. DBase uses indexes to associate the GoldMine files, and these indexes are subject to corruption. If the corruption is not corrected (using the reindex or rebuild tools), the system could start losing track of the relationship of the files that build the record. This could not only cause synchronization problems, but the corruption could even be passed to the server, and then from the server to other laptops.
- There could be other database corruption problems such as BLOB (Binary Large Object, or Notes fields) errors. Very large note fields are especially vulnerable to this type of corruption. The best preventative measure is to keep many small notes (such as separate notes for each call or meeting) rather than one very large notes field for several interactions.

■ Duplicate CONTACT2 records

- This is a specific kind of data corruption that is especially insidious. Each Contact1 record expects to have a single Contact2 associated record. For a number of reasons, including index corruption or someone restoring a system by overlaying a file, GoldMine may not realize that it has a Contact2 record, and may build another one. This creates duplicate Contact2 records.
- When you look at a record or sync a record, you will randomly select one of the Contact2 records to associate with the Contact1 record. Depending on which one you see, some fields will have missing or incorrect data. Next time, if you happen to see the other Contact2 record, you will see different values in the fields.
- Since this problem will synchronize, the resulting issues may be viewed as sync problems.

■ Deleting transaction logs

- If possible NEVER purge the Tlogs, although this is highly unlikely as they will bloat in size, and cause the system to slow down. If you do purge the logs, make sure that you first create a transfer-set of the GoldMine customizations. This is the only way you can send customization changes to remote sites. Also, save a few months worth of TLOGS rather than purging ALL Tlogs

- From time to time, it may become necessary to delete your transaction logs or individual log entries. One reason might be that someone has wrongfully deleted a record, and you must delete the offending deletion log entries in order to restore the record.
- The problem is that this is a very difficult process, and people tend to do it incorrectly. Often they delete entire files when they should be deleting individual entries.
- When the file is deleted, GoldMine “forgets” information critical to synchronization, and “errors” could result.
- There are transaction logs in the main sync server, and in all synchronizing computers so there are many potential points where errors could occur. This makes it difficult to identify the problem.
- The protocols necessary to ensure that you do not lose data when you delete the transaction logs are difficult to follow, and few people do it correctly. The protocols require that every synchronizing computer in the entire environment be involved, and usually all in the same day.

■ Syncing with a filter active

- A user may activate a group or filter for any number of very valid reasons. However, if he accidentally leaves it active when he syncs, then only the records defined by the filter or group will sync.
- Note that if a user has active tagged records or has activated an org chart section, it has the same effect as an active filter.
- Next time he syncs, the sync will be from the date, and time of the last sync, so the records that were missed will not be synced.

■ Syncing while logged in as someone else

- Sometimes users log in as someone else for a number of reasons (for example, they may log in as “Master” in order to perform a function that requires master rights).
- If they forget who they are, and sync, they will be using a wrong sync filter. In the case of Master, it is probably no filter at all which will mean that they are syncing all of their records. In addition, Master will be syncing as of the last time he synced (which was probably “never” in the case of a laptop) so it could sync years of data, and cause havoc in the main system. Again, proper setup could prevent this or at least make it extremely difficult for the user to make the error.

■ Incompatibility between the GoldSync Server, and the Client

- The server, and the remote sites should always use the same encryption level.
- The server, and the remote sites should always be on the same version and build.
- Make sure that the remotes Regional Settings are appropriately selected for where that individual may be based (GoldSync automatically compensates for time differences in different time Zones).

■ Locking an active record

- If you have a record open in edit mode (including a history or calendar record), it is locked, and will not sync. Over time, this could cause an accumulation of unsynced data.

■ Locking a document

- If you have a document open, then it is locked, and will not sync.

■ Syncing with the wrong database open

- You may work on multiple databases (such as a primary, and an archival database). If you are in the archive, and forget where you are, you might launch a synchronization from that file. This will cause the wrong data to synchronize. In some countries it is legal for the sync administrator to shoot you if you do this.

■ Duplicate Record Merging

- When you merge duplicates you might merge two records representing the same person, but which were each “owned” by different reps. After the merge, the record may “disappear” from one rep, who will view it as a sync error.

■ Overlaying files

- In an effort to restore data or to correct other problems, a GoldMine Administrator may copy a file such as the Contact1 file or the Calendar file for dBase systems. This can be

a very efficient shortcut to correct problems. However, if it is not done exactly correctly it can cause extensive data corruption, and/or sync corruption.

- DO NOT “selectively” restore Tlogs from a backup. Doing so may cause recently entered records to be tracked incorrectly!

■ Database structure changes

- You may have changed the field structure in GoldMine. Assuming that your sync settings allow, these changes will go to your remote sites through sync.
- If the same sync set that changes the field structure also contains data for these new fields, that data may not sync because at the time of the sync the fields do not exist.

■ Transmission and application errors

- The sync files may be corrupted during transmission. If they are not received at all, then GoldSync will re-send them in the next sync session so there will be no long term harm. However, if they are received, and the sync process starts, and if it is aborted because of an incomplete file or other transmission problem, GoldSync will think that it got the file, and will not realize that data is missing.
- If GoldMine or Windows freezes while the sync set is being applied, or if there are other application errors, the data that is not applied will be lost. GoldSync will not realize that not all data has been applied.

■ Out of space

- If you run out of disk space during a sync, that sync will abort.
- If you are not paying attention to the progress monitor, you may not realize that you had a problem.
- In most circumstances, GoldMine will realize that the sync did not complete properly, and will “catch up” the next time that it is able to run a complete sync.

■ No Transfer Set to Pick Up

- In one of the sync options called queued processing, transfer sets are created on a schedule, and are then sent when the user syncs. This saves him the time of waiting for the transfer set to be created.
- In the event that there is no transfer set available, he will get a message in his progress monitor saying that there is no transfer set to pick up. If he does not read the message, he may not realize that he has not gotten any data, and he may view the lack of new data as a sync error.
- In most circumstances, GoldMine will realize that the sync did not complete properly, and will “catch up” the next time that it is able to run a complete sync.

■ Restoring a database from a backup

- Sometimes a GoldMine database must be restored from backup files. This may be the primary database or it may be a laptop database.
- Since the database, including all sync logs, has now been restored to an earlier version, some data could fail to sync.
- Even worse, the database administrator may only restore selected files. Depending on the sync rules in force, and the files that were restored, this could cause any number of problems with synchronization. If this happens to you, try your best to find out when the files were restored, what files were restored, and the date(s) of the restored files. Give this information to the person who is helping you to recover.
- This can create some very complex problems, especially if there have been several synchronizations after the backup restore, and before you realize that there is a problem.

■ Main contact record Notes tab

- When you enter data into the Notes tab in the main GoldMine record (not the Notes of a calendar or history or Detail tab transaction), that note is automatically date/time stamped.
- GoldMine will synchronize the new note on the next sync, however, if it sees the same date/time stamp in the receiving system, then it will assume that it has already been synced, and will not apply the new note.
- This means that if you edit such a note after you sync, the edit will never sync (even if you set back the sync clock). This is not a bug: It is the way the system is designed. Nevertheless, many users will view it as a sync problem. The solution is to add new notes when you need to change what you said, rather than editing old notes.

■ Program bugs

- From time to time we find actual program bugs that could affect sync. These could be bugs that have always existed, but occurred so rarely that nobody ever noticed, or new bugs introduced when some part of GoldMine was updated.
- FrontRange will correct these bugs if they are reported, and if they can replicate the problem.

How do I correct sync problems?

■ Attempt to diagnose the problem

- Bearing in mind that the problem could have many causes as noted above, review the sync logs, inspect the files, and otherwise do what detective work you can to determine the cause of the problem. This is not an easy task.
- Use diagnostic tools to help identify the problem. A tool called "Sync Spy" is built into GoldMine. It will show you the "Sync Stamp" of various Contact1, and Contact2 fields.
- If you are unable to diagnose the problem, you can often cure the sync problems without even knowing what caused them using the following techniques

■ Set back the sync date

- Manually set the From date, and time to a time earlier than the last date when you are confident that all data was properly synced.
- Ensure that you have not locked any records or documents, that you have the proper sync settings, etc.
- Run synchronization to "pick up" individual updates that were missed in prior synchronizations.
- Be aware that, depending on where the data is missing, you may have to set back the sync dates on the sync server, on the remote system(s), or both. In most cases it is safest to set back the date on all systems.

■ Correct data problems

- Pack/rebuild your files.
- Use dSalvage or other utility to find and fix BLOB errors (as mentioned earlier, BLOBs are Binary Large Objects). In GoldMine, BLOBs are the Notes fields. If a process locks with a BLOB error on a particular transaction, then that transaction (or the one following it) is probably the offending record. An easy cure is to:

Open GoldMine
Go to that record
Edit the record and copy the notes onto your Windows NotePad
Delete the note from the transaction
Save the change
Open the record in edit mode
Paste the notes back in from your Windows NotePad
At this point, the BLOB error should be cured

- Take other steps as necessary depending on the nature of the corruption: Any database can become corrupted in dozens of ways. The corruption will cause sync problems. It is beyond the scope of this white paper to discuss all possible forms of database corruption.

■ Delete transaction log entries

- Identify the exact RecID of the wrongfully deleted record(s).
- Find, and delete the corresponding deletion transactions in the transaction log of every computer that was affected.
- WARNING: If you miss a single computer, and if that computer later syncs, you may need to repeat the entire process. To prevent this problem, you should "turn off" sync in the GoldSync Administrator for all remote databases, and "turn on" each only after you have confirmed that it is "clean."
- This is difficult, but far less difficult than the protocol for deleting the entire transaction log.

■ Delete entire transaction log

- All remote computers, and the sync server must be backed up.

Note

This Whitepaper was written when GoldMine still had a Standard Edition brother that ran on dBase, hence, Davids recommendation of dSalvage. In GoldMine Premium you will not see BLOB errors or be able to utilize dSalvage to fix anything.

- All remote computers must sync all of their data to the sync server. There should be no transmission sync filters.
- There must be no further entries after this sync.
- Transaction logs must be deleted from all remote computers, and from the sync server.
- The sync server sends deletion filters as needed.
- The sync server sends a transfer set dated as far back in time as necessary (depending on your analysis of the data problems).
- This is a very difficult protocol in practice. If even one remote computer does not follow the protocol then the problems could be reintroduced.

■ **Full sync restore**

- All remote computers, and the sync server must be backed up.
- All remote computers must sync all of their data to the sync server. There should be no transmission sync filters.
- Delete all data, and all transaction logs from all of the laptops.
- Set back the sync date of the sync server to day zero, and build transfer sets for each remote computer.
- Completely rebuild every remote computer using the new transfer sets.

