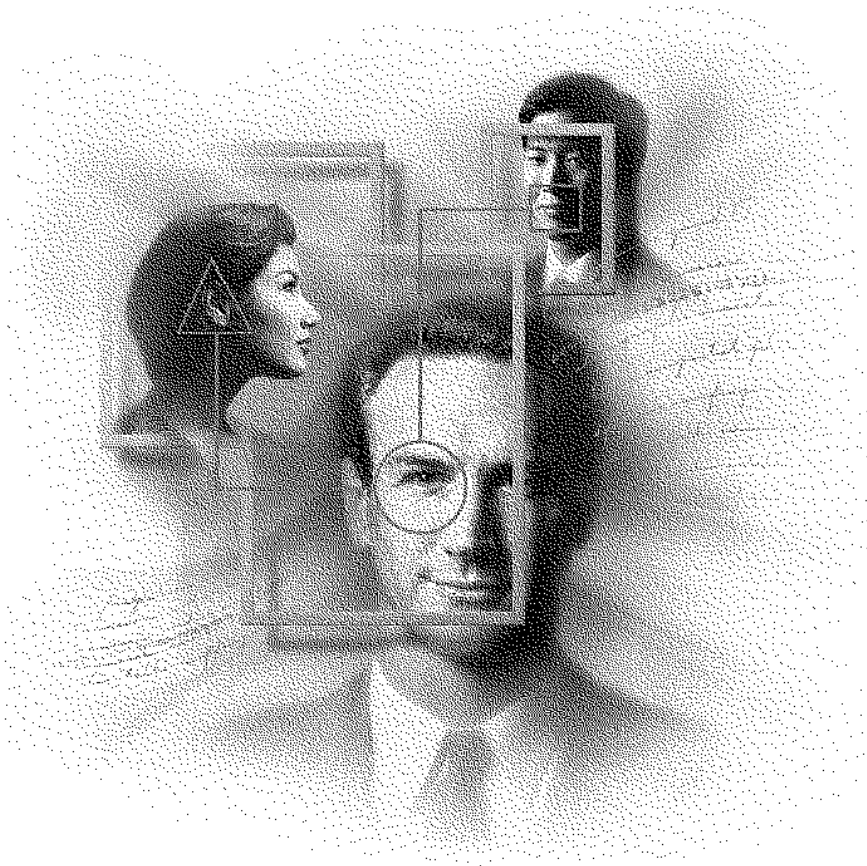


VERSION 5.5

GroupWise and

Daylight Saving Time



GroupWise®

GATHER, ACCESS, AND COMMUNICATE INFORMATION

Novell®

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Novell, Inc.  
122 East 1700 South  
Provo, UT 84606  
U.S.A.

[www.novell.com](http://www.novell.com)

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# GroupWise and Daylight Saving Time

This document briefly explains the concepts of world time zones and the application of Daylight Saving Time, how DST is handled with different versions of GroupWise<sup>®</sup> (4.x and 5.x), and ways to recognize and correct possible DST problems in GroupWise.





# 1

## Checking for Daylight Saving Time Readiness

If you have already encountered problems with appointment times or message time stamps, it is probable that your GroupWise® system will have difficulty with Daylight Saving Time (DST) changes. To help you resolve these difficulties, see [Chapter 2, “Concepts, Issues, and Solutions,” on page 19](#).

If you are running a total GroupWise 4.1 system without difficulty, you must remember to manually update DST dates at GroupWise 4.x sites a week after DST begins and again a week after DST ends. This must be done every year. You should also review [“Other Important GroupWise 4.x Daylight Saving Time Facts” on page 23](#).

If you are not sure whether your 5.0, 5.1, or 5.2 GroupWise system will have DST difficulties, and if your system includes versions (including 4.1 versions) of the clients, agents, post offices, or domains that predate the GroupWise 5.2 Support Pack 3 (released April 15, 1998), you should determine whether the observance of DST will affect message time stamps or appointments that have been set to occur while DST is in effect. The [“DST Transition Worksheet” on page 17](#) helps you to record the information you find as you perform this DST readiness check. The readiness check consists of the following tasks:

- ♦ [“Checking the Version of Your GroupWise Snap-In” on page 10](#)
- ♦ [“Checking the Version of Your GroupWise Clients” on page 11](#)
- ♦ [“Checking the Domain Time Settings” on page 12](#)
- ♦ [“Checking the Post Office Time Settings” on page 14](#)

The information in this section will refer you to information that can help you resolve potential DST problems.

## Checking the Version of Your GroupWise Snap-In

When GroupWise is installed, a group of dynamic link libraries (DLLs) is "snapped in" to NetWare<sup>®</sup> Administrator, making it possible to administer GroupWise and the network from a central location. Different versions of GroupWise have used different snap-ins, and as GroupWise has evolved, its ability to handle the dynamics of worldwide Daylight Saving Time and reconciling those dynamics with GroupWise appointments has improved.

Earlier versions of the snap-in were 16-bit enabled only. They used an absolute method of calculating time stamps and appointment times based on time settings entered by the administrator during installation or in earlier versions (5.0 and 5.1) of the GroupWise Administration program. You can confirm that you have an early version of the snap-in if you find GWADMA3X.DLL in the \PUBLIC directory from where you run NetWare Administrator. If your GroupWise system uses the GWADMA3X.DLL, it also uses absolute values for calculating appointment times.

Later versions (beginning with 5.2) of the snap-in were 32-bit enabled. You can confirm that you have a later version of the snap-in if you find GWADMA32.DLL in the \PUBLIC\WIN95 directory, the \PUBLIC\WINNT directory, or the \PUBLIC\WIN32 directory from where you run NetWare Administrator. At first, the GWADMA32.DLL snap-in continued to use the absolute value calculation method, but was later enhanced to use a formula for performing calculations for appointment times. The formulaic method does a better job of accounting for Time Zone and Daylight Saving Time differences when appointments are scheduled far in advance or across time zones. The following table summarizes the characteristics of the GroupWise 5.2 snap-in:

<b>Release Date</b>	<b>Formula-based Calculation or Absolute Value Calculation</b>
earlier than 7/24/97	Absolute
7/24/97	Formula - incomplete
12/22/97	Formula - incomplete
4/15/98	Formula
later than 4/15/98	Formula

Knowing the version of the GroupWise snap-in that you use to administer GroupWise will tell you whether your system has been patched to implement the formula-based method of calculation.

---

#### WORKSHEET

---

Under **Item 1: GroupWise Snap-In Data**, enter the snap-in name, release date, and appointment calculation method.

Make sure you check every server from which you run NetWare Administrator.

---

If the GWADMA32.DLL you are using is dated prior to 4/15/98, you must apply GroupWise 5.2 Support Pack 3 (SP3) before you can resolve any DST issues. For more information about SP3, see [Appendix C, “GroupWise 5.2 Support Pack 3,” on page 51](#). When you have applied SP3, you may continue checking DST readiness by referring to [“Checking the Version of Your GroupWise Clients” on page 11](#).

Continue with the other tasks in this section to check for possible DST conflicts and the methods you should use to resolve them.

## Checking the Version of Your GroupWise Clients

Because messages and appointments originate at an individual user’s GroupWise client program, the client itself is responsible for assigning times to these messages and appointments. The method that the GroupWise client uses for calculating appointment times has continued to evolve, just as the GroupWise snap-in DLL evolved its calculation method from using absolute values to using a formula. The following table lists GroupWise client types, their release dates, and their calculation methods.

Client Type	Release Date	Formula-Based Calculation or Absolute Value Calculation
4.1, 16-bit	All dates	Absolute
5.0, 16-bit or 32-bit	All dates	Absolute
5.1, 16-bit or 32-bit	All dates	Absolute
5.2, 16-bit	7/24/97	Absolute

---

Client Type	Release Date	Formula-Based Calculation or Absolute Value Calculation
5.2, 32-bit	7/24/97	Formula
5.22, 16-bit	12/22/97	Absolute
5.22, 32-bit	12/22/97	Formula
5.23, 16-bit	4/15/98	Formula
5.23, 32-bit	4/15/98	Formula
All Versions	Later than 4/15/98	Formula

Knowing whether a client uses an absolute or formula-based calculation method will help you to know whether you should continue your readiness check. To check the client version and release date from the client program, open the GroupWise client > click Help > About GroupWise.

---

#### WORKSHEET

---

Under **Item 2: GroupWise Client Data**, enter the client type, release date, and appointment calculation method.

Check all locations where the client is installed and list the versions and release dates of the GroupWise client that are running on this domain. If you think there is a chance that a user may not be using the client you provided, you can have each user report his or her own client version and release date.

---

If you have any clients that use the absolute calculation method, you need to investigate to see if the different time settings in the GroupWise system match with the local time settings established for each time zone. If the settings do not currently match, you can take the corrective action appropriate for your circumstances. For more information about checking GroupWise system time settings, see [“Checking the Domain Time Settings” on page 12](#) and [“Checking the Post Office Time Settings” on page 14](#).

## Checking the Domain Time Settings

The GroupWise client relies on time zone settings in its system to calculate appointments. The time zones can be defined at the domain or post office

level. If the local time zone values (that is, the actual time zone values), the time zone values set in GroupWise administration, and the values listed in the time zone database record do not match, you must take corrective action.

---

**WORKSHEET**

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Under **Item 3: Domain's Local Time Settings**, enter the name of the domain's time zone, its GMT offset, and the amount of DST offset, if any.

---

An administrator manually configures the time zone settings for a domain during installation or subsequent configuration by using the GroupWise 4.1 administration program (AD.EXE) or NetWare Administrator. Because the settings may not be correct, you should check them with standard settings in the time zone where the domain resides.

---

**WORKSHEET**

---

Under **Item 4: Domain's Configured Time Settings**, enter the time setting details of the GroupWise domain object, including time zone name, GMT offset, and the amount of DST offset, if any. Use AD.EXE or NetWare Administrator to obtain these values.

---

The time zone settings for a domain are also listed in the time zone record of the domain database. You can check these values by using the GroupWise Diagnostics menu in NetWare Administrator. For more information, see **Appendix B, "The GroupWise Diagnostics Menu and Time Zone Settings,"** on page 41.

---

**WORKSHEET**

---

Under **Item 5: Domain's Time Zone Record Settings**, enter the time setting details of the GroupWise domain object, including time zone name, GMT offset, and the amount of DST offset, if any. Use the GroupWise Diagnostics menu under Tools in NetWare Administrator to obtain these values.

---

Compare the data in **worksheet item 3**, **worksheet item 4**, and **worksheet item 5**. You must determine whether the values match or do not match, then you must follow procedures based on this comparison. Do not continue with the rest of the section until you have followed these procedures.

## If the Domain Time Values Match

If the domain time values match, you are ready to check the post office time settings. If you are still using GroupWise 4.1 in some domains, you should:

- ◆ Remember to manually update DST dates at GroupWise 4.x sites a week after DST begins and again a week after DST ends. This must be done every year.
- ◆ Review [“Other Important GroupWise 4.x Daylight Saving Time Facts” on page 23](#).

## If the Domain Time Values Do Not Match

If the domain time values do not match or are inaccurate, you must follow specific procedures to resolve the problem. The procedure you use depends on whether you are using GroupWise 4x domains or GroupWise 5.x domains.

### GroupWise 4.x Domains

Use procedures outlined in [“Resolving 4.x DST Problems” on page 23](#).

### GroupWise 5.x Domains

Use procedures outlined in [“Troubleshooting and Resolving 5.x DST Problems” on page 28](#).

## Checking the Post Office Time Settings

The GroupWise client relies on time zone settings in its system to calculate appointments. The time zones can be defined at the domain or post office level. If the local time zone values (that is, the actual time zone values), the time zone values set in GroupWise administration, and the values listed in the time zone database record do not match, you must take corrective action.

---

### WORKSHEET

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Under [Item 6: All Post Offices and Their Local Time Settings](#), enter the name of each post office in this domain, its GMT offset, and the amount of DST offset, if any.

---

An administrator manually configures the time zone settings for a post office during installation or subsequent configuration using AD.EXE or NetWare Administrator. Because the settings may not be correct, you should check them with the standard settings of the time zone where the domain resides.

---

#### WORKSHEET

---

Under **Item 7: Configured Time Settings of Each Post Office**, enter the time setting details of each GroupWise post office object, including time zone name, GMT offset, and the amount of DST offset, if any. Use AD.EXE or NetWare Administrator to obtain these values.

---

The time zone settings for a domain are also listed in the time zone record of the domain database. You can check these values by using the GroupWise Diagnostics program. For more information about using the program see **Appendix B, “The GroupWise Diagnostics Menu and Time Zone Settings,” on page 41.**

---

#### WORKSHEET

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Under **Item 8: Time Zone Record Settings of Each Post Office**, enter the time setting details of the GroupWise post office object, including time zone name, GMT offset, and the amount of DST offset, if any. Use the GroupWise Diagnostics menu under Tools in NetWare Administrator to obtain these values.

---

Compare the data in **worksheet item 6**, **worksheet item 7**, and **worksheet item 8**. You must determine whether the time values for the post office either match or do not match. You can take steps based on this comparison.

## If the Post Office Time Values Match

If the post office time values match, you should be ready for implementing Daylight Saving Time without making major adjustments. If you want more information about Daylight Saving Time in the GroupWise environment, see **Chapter 2, “Concepts, Issues, and Solutions,” on page 19.**

## If the Post Office Time Values Do Not Match

If the post office time values do not match or are inaccurate, you must follow specific procedures to resolve the problem. The procedure you use depends on whether you are using GroupWise 4.x or GroupWise 5.x.

## **GroupWise 4.x**

If the time values do not match in your GroupWise 4.x post offices, use the procedures outlined in [“DST Issues in GroupWise 4.x” on page 22](#).

## **GroupWise 5.x**

If the time values do not match in your GroupWise 5.x post offices, use the procedures outlined in [“Troubleshooting and Resolving 5.x DST Problems” on page 28](#).

Note that correcting a DST problem may bring it to the attention of users who didn't realize any problems existed in GroupWise. To learn about the optimal time to correct DST problems and leave GroupWise users unaffected, see [“When to Correct DST Problems” on page 34](#).



# DST Transition Worksheet

Complete a copy of the following worksheet for each domain in your GroupWise system if you are running any GroupWise 4.1, 5.0, 5.1 or 5.2 components in that system.

GroupWise Domain

Name: \_\_\_\_\_

Item	Example	Explanation
1) GroupWise Snap-In Data:	GWADMA32.DLL 07/24/97 Formula - incomplete	<b>5.0, 5.1:</b> Record the release date of the GWADMA3X.DLL that is installed in the \PUBLIC directory of the workstation where you run NetWare Administrator.  <b>5.2:</b> Record the release date of the GWADMA32.DLL that is installed in the \PUBLIC\WIN95 directory, the \PUBLIC\WINNT directory, or the \PUBLIC\WIN32 directory of every server from which you run NetWare Administrator.
2) GroupWise Client Data:	5.2 16-bit ♦ 07/24/97 ♦ Absolute  5.2 32-bit ♦ 07/24/97 ♦ Formula	Record all of the different client types running on your system, the release date of each type and the appointment calculation method of that type.
3) Domain's Local Time Settings:	Arizona - MST (GMT-7) DST Offset = Not observed	Record the name of the time zone, its GMT offset, and the amount of DST offset, if any.
4) Domain's Configured Time Settings:	MST (GMT-7) DST Offset=None	Check the time setting details of the GroupWise domain object by using AD.EXE or NetWare Administrator.
5) Domain's Time Zone Record Settings:	MST (GMT-7) DST Offset=0 minutes	Use GroupWise Diagnostics to check the record information for this time zone. For more information, see <a href="#">Appendix B, "The GroupWise Diagnostics Menu and Time Zone Settings,"</a> on page 41.

Item	Example	Explanation
6) All Post Offices and Their Local Time Settings:	Sales MST (GMT-7) DST = +1 Service MST (GMT-7) DST = +1 Purchasing MST (GMT-7) DST = 0	Record the name of each post office in this domain, its local time zone, its GMT offset, and the amount of DST offset, if any.
7) Configured Time Settings of Each Post Office:	Sales MST (GMT-7) DST = +1 Service MST (GMT-7) DST = +1 Purchasing MST (GMT-7) DST = 0	Check the time setting details of each GroupWise post office object by using AD.EXE or NetWare Administrator.
8) Time Zone Record Settings of Each Post Office:	Sales MST (GMT-7) DST = 3600 Service MST (GMT-7) DST = 3600 Purchasing MST (GMT-7) DST = 0	Use GroupWise Diagnostics to check the record information for this time zone. For more information, see <a href="#">Appendix B, "The GroupWise Diagnostics Menu and Time Zone Settings," on page 41.</a>

# 2

## Concepts, Issues, and Solutions

GroupWise® has always been carefully designed to recognize a basic principle of electronic communication: time is relative to the location where that communication may occur. Although the time of day varies throughout the world at any given moment, a responsible network messaging system will reconcile those differences in message time stamps and scheduled appointments. The more widespread the communication, the greater the responsibility of the messaging technology to keep the communication synchronized and useful to those who must deal with time differences.

With this premise in mind, GroupWise engineers designed GroupWise to account for and synchronize messages not only by using the finite standards of the defined world time zones, but also by using the more unevenly applied standard known as Daylight Saving Time (DST).

The purpose of this document is to briefly explain the concepts of world time zones and the application of DST, how DST is handled with different versions of GroupWise (4.x and 5.x), and ways to recognize and correct possible DST problems in GroupWise. The information is included in the following sections:

- ◆ [“Time Zone and Daylight Saving Time Concepts” on page 20](#)
- ◆ [“Recognizing DST Issues in Versions of GroupWise” on page 21](#)
- ◆ [“Troubleshooting and Resolving 5.x DST Problems” on page 28](#)
- ◆ [“When to Correct DST Problems” on page 34](#)

# Time Zone and Daylight Saving Time Concepts

## Understanding Time Zones

The earth's rotation from daylight to darkness and the need for constant communication between different locations in the world make it necessary to establish a system for measuring time based on a single standard. This standard, called Coordinated Universal Time (UTC) is a measurement of mean solar time beginning at a defined longitude on the earth (0 -- the prime meridian). From this longitude, traveling both east and west, timekeepers divide the earth into 24 increments of 15 longitude each. Each of these increments represents a different "standard" time zone and is numbered relative to the prime meridian by adding or subtracting one hour. Thus each time zone is referred to by its "offset" from UTC, so the world time zones are designated from -12 through 0 (UTC) to +12. UTC time designations can also be referred to as Greenwich Mean Time (GMT), so named because authorities at the Greenwich observatory in England established it as the location of the prime meridian.

## Understanding Daylight Saving Time

Daylight Saving Time is the system of setting clocks one or two hours ahead of standard time so that both sunrise and sunset occur at a later hour, thus artificially moving a period of daylight to the evening hours. For example, in the northern hemisphere, clocks are usually set ahead one hour in the spring and set back to standard time in the fall. When DST is in effect in the southern hemisphere it will not be in effect in the northern hemisphere, and vice versa. Daylight Saving can be considered a political system, rather than a scientific one, because national and regional governments decide whether they will adopt the system or not. In some time zones, DST may not be used at all. Governments or institutions may define the DST starting and ending dates years in advance, but they may also change these dates at any time. For example, in 1996, most of Europe adopted a new DST standard end date setting of the last Sunday of October. Many of the countries agreeing to the change had formerly ended DST on the last Sunday of September. Because of the lack of consistent DST adoption by the world's governments, the total number of times-of-day within all time zones adds up to about 50.

# Recognizing DST Issues in Versions of GroupWise

The constant variability in the adoption of Daylight Saving Time, the improving technology and design of GroupWise, and the need for backward compatibility have uncovered some important issues regarding GroupWise and DST.

Because different versions of GroupWise deal with DST configuration in different ways, and because worldwide DST is now implemented differently than it was when older versions of GroupWise were designed, you may see evidence that GroupWise is not handling time-related information correctly. Your users may report any of the following problems:

- ◆ Meetings are scheduled to start one hour earlier or later than the sender specified.
- ◆ Incoming messages show an incorrect delivery time.
- ◆ Status of outgoing messages shows incorrect send or receive times.

These symptoms are a result of DST start and end dates being incorrectly calculated. Most commonly, this occurs because:

- ◆ The 5.x system or part of the 5.x system was migrated from GroupWise 4.1 with GroupWise 5.2 Support Pack 2 or earlier code.
- ◆ The original 4.1 system that was migrated to 5.x did not use Daylight Saving Time (that is, the DST clock change settings for the affected time zones were set at 0). For more information about this scenario, see [“DST Reactivated in a 5.x System Migrated From 4.1” on page 25](#).
- ◆ Some of the post offices (either in 4.x or 5.x systems) used incorrect DST settings.

This section of the document discusses the most common GroupWise DST issues and offers possible solutions. The information is organized according to the version of GroupWise you have.

- ◆ [“DST Issues in GroupWise 4.x” on page 22](#)
- ◆ [“DST Issues in GroupWise 5.x” on page 24](#)

This section also includes information about rarely-occurring circumstances that can cause DST miscalculation in GroupWise. For more information, see [“Unusual DST Problems” on page 26](#).

## DST Issues in GroupWise 4.x

In GroupWise 4.1, appointments are "stored" and "displayed" relative to Greenwich Mean Time. The relationship between the appointment time and GMT is expressed as an "offset" from GMT. The offset is directly affected by the domain and post office time zone and Daylight Saving Time settings you configure in the GroupWise 4.1 administration program, AD.EXE.

If you make changes to these settings while the GroupWise system is in use, those changes are replicated throughout the system. For example, if you change the DST offset after an appointment has already been "stored," that appointment will be "displayed" using a different offset than was in effect when it was "stored." Because of this, the following precautions are recommended:

- ◆ Always change the DST settings, including offset, beginning date, and ending date, well before the time when users may set appointments to occur inside the DST observance period. If some advance appointments are already set to occur during that period, all such appointments will be "bumped" by one hour.
- ◆ Always be sure of the DST observance or non-observance at every physical location where a GroupWise 4.1 domain or post office resides. If one of these objects is physically located in an area that does not implement DST, while other objects in the same GroupWise system are physically located in areas that do implement DST, the non-DST object must not be assigned the same time zone as the DST objects. If all objects are assigned the same time zone, AD.EXE assumes that DST settings apply to all objects which share the same time zone, and so it replicates DST settings throughout the system. Obviously, this makes the appointments in non-DST user mailboxes inaccurate.

### Example

The state of Arizona does not observe DST. From a DST point of view, Arizona is logically located in Mountain Standard Time for part of the year, and Pacific Daylight Time for the remainder of the year.

If a company had domains in Los Angeles, Phoenix, and Denver, the administrator would assign a different time zone for each domain, making sure that the DST setting was correct for each time zone. Then, in January, a user in Los Angeles could schedule users in Phoenix and Denver for a July conference call and all participants would display that appointment at the appropriate time. However, if the administrator assigned the same time zone

to the Phoenix domain as the Denver domain, or to the same time zone as the Los Angeles domain, the move to DST would bump all Phoenix domain appointments previously scheduled during DST.

It is possible that the DST setting for a 4.x domain and the DST setting for a 4.1 post office may not be the same, even when they share the same time zone. If this condition exists and appointments have already been set, correcting the DST offset at a domain incorrectly bumps appointments in all other domains in that time zone. This may occur if routine database synchronization is interrupted, such as when the GroupWise 4.x Administration Server is not running or the target database is damaged.

## Resolving 4.x DST Problems

If you detect a DST synchronization problem after appointments have been scheduled to occur during DST observance, there are three solutions:

- ◆ Remove the offset that originally caused the appointments to be bumped. This solution corrects the display problems within the domain but leaves the domain's DST setting unsynchronized with the rest of the system.
- ◆ Reschedule the appointments. This may be difficult if the start and end dates of DST will change for the coming year. For GroupWise 4.1 user instructions for using the client to locate sent appointments, see [Appendix F, "Rescheduling Multiple Outbound Appointments,"](#) on page 69.
- ◆ Run the GroupWise 4.x Appointment Time Adjuster to modify the appointments in a 4.x post office. For more information, see [Appendix D, "GroupWise 4.x Appointment Time Adjuster,"](#) on page 57.

## Other Important GroupWise 4.x Daylight Saving Time Facts

There are a few other Daylight Saving Time facts that GroupWise 4.1 administrators should be aware of:

- ◆ If you schedule an appointment on the day (and possibly the day after) that DST goes into effect, that appointment will be stored correctly but displayed incorrectly. There will be a one hour difference. This is a GroupWise 4.x architectural limitation and cannot be corrected.
- ◆ GroupWise 4.x does not allow DST offsets of less than 1 hour (as allowed, for example, in Newfoundland). This is a GroupWise 4.x architectural limitation and cannot be fixed.

- ◆ Remember to change the DST begin date and the Standard Time begin date for DST-affected time zones in GroupWise 4.1 as the calendar dates change each year for these settings.

The GroupWise 4.x Appointment Time Adjuster can help you modify existing, future appointments residing in GroupWise 4.x post offices. For more information about this tool, see [Appendix D, “GroupWise 4.x Appointment Time Adjuster,” on page 57](#).

## DST Issues in GroupWise 5.x

Although improvements have been made in GroupWise 5.x with regard to Daylight Saving Time, some issues still exist if newer GroupWise 5.x code communicates with 4.x or older 5.x code. This section discusses some of the causes of DST problems in GroupWise 5.x, including the specific problems that occur when DST is reactivated in a 5.x system migrated from 4.1.

### General Causes of DST Problems

Prior to the release of GroupWise 5.2, time zone information (that is, local UTC) had to be defined for domains and post offices using absolute, preset dates for Daylight Saving Time changes. Later, when the GroupWise 5.2 32-bit client was introduced, a more robust, formula-based DST definition was implemented (for more information about this method, see [Appendix A, “GroupWise Appointment Time Calculation,” on page 37](#)).

Still later, with the release of GroupWise 5.2 Support Pack 3 (SP3), this formula-based definition was extended to all GroupWise 5.2 components (including the 16-bit client). To maintain backward compatibility and version connectivity, GroupWise 5.2 domain and post office databases were also designed to store GroupWise 4.x post office and gateway time zone definitions that continue to use absolute DST information.

These differences in time zone reckoning can be represented in two groups:

#### **Group A:**

The "absolute date" time zone configuration group, which includes:

- ◆ All GroupWise 4.x components
- ◆ All GroupWise 5.0 components
- ◆ All GroupWise 5.1 components
- ◆ The GroupWise 5.2 16-bit client released prior to SP3



**IMPORTANT:** If you previously elected to disable DST or to edit a Time Zone definition in GroupWise 4.x, these settings will be lost during a migration to GroupWise 5.2. You can easily restore the settings if SP3 has been applied.

### Group B:

The "formula-based" time configuration group, which includes:

- ◆ The GroupWise 5.2 32-bit client
- ◆ The GroupWise 5.2 16-bit client (after SP3 has been applied)
- ◆ The GroupWise 5.5 16-bit client
- ◆ The GroupWise 5.5 32-bit client

If these two component groups communicate using the same GroupWise systems, (usually after a 4.1 migration) symptoms of incorrect DST information sharing may occur, including:

- ◆ Differences in appointment times between 5.x and 4.x users
- ◆ Incorrect time stamps on messages processed by gateways
- ◆ Incorrect DST start and end dates for 4.x users.



### DST Reactivated in a 5.x System Migrated From 4.1

If you are experiencing appointment synchronization problems in a GroupWise system that was recently migrated to GroupWise 5.x from GroupWise 4.1, it may be because the administrator of the 4.1 system set the DST clock change settings of particular time zone to zero. This deactivates the observance of DST in that time zone by GroupWise 4.1. However, when the GroupWise 4.1 system is migrated, GroupWise 5.2 (with SP3) or GroupWise 5.5 apply their own default time zone definitions to domains and post offices, so DST is reactivated. In this way, depending on the time of year you migrate your post offices and the scheduled dates of the appointments in those post offices, appointment times will be incorrect:

- ◆ If you migrate a post office while DST is in effect for a DST time zone, the appointments for users in that time zone are moved forward one hour

on the GroupWise Calendar. For example, an appointment scheduled for 2:00 p.m. is moved to 3:00 p.m.

- ◆ If you migrate a post office while DST is not in effect for a DST time zone, the appointments for users in that time zone scheduled to occur when DST is in effect are also be moved forward one hour on the GroupWise Calendar. Appointments scheduled to occur during non-DST are unaffected.

For more information about adjusting the appointment times that were changed during migration to GroupWise 5.2 (with SP3 applied) or to GroupWise 5.5, see [“Rechecking the Appointment Times” on page 32](#).

If the GroupWise 4.1 system was migrated to a GroupWise 5.x system before SP3 was applied, you may have manually deactivated DST settings in order to avoid appointment synchronization problems. If you apply SP3 to the system now, you can reactivate DST for the post offices in time zones where it had been deactivated. After you apply SP3 and correct the DST settings, perform the following tasks on a day when DST is no longer in effect:

- ◆ Run the GroupWise 5.x Appointment Time Adjuster on each 5.x post office to move all appointments between April 5 and October 25, 1998 to one hour earlier.
- ◆ Run the GroupWise 5.x Appointment Time Adjuster on each 5.x post office to move all appointments occurring during the 1999 DST observance to one hour earlier.
- ◆ Run the GroupWise 5.x Appointment Time Adjuster on each 5.x post office to move all appointments occurring during the 2000 DST observance to one hour earlier.

## Unusual DST Problems

There are also at least two highly unusual circumstances which, when combined with Daylight Saving Time and GroupWise 4.1 migration, cause incorrect DST calculation.

- ◆ Newfoundland, Canada and DST. This problem occurs when appointments are sent from or received at Newfoundland, Canada.
- ◆ Beep On Error Set in GroupWise 4.1. This problem occurs when a certain GroupWise 4.1 system environment option is set up.

## Newfoundland, Canada and DST

You may notice that appointments sent to the Newfoundland time zone (NFT) from another time zone are scheduled 4 hours, 16 minutes late when DST is not in effect or 3 hours late when DST is in effect. Appointments received from NFT are scheduled 4 hours early when DST is not in effect or 3 hours early when DST is in effect.

This problem affects any time zone that is designated with a negative GMT offset and uses a DST change of less than 60 minutes. The Newfoundland time zone is currently the only time zone that meets these criteria.

You can correct the NFT problem by applying GroupWise 5.2 Support Pack 3. However, if you are a GroupWise system administrator residing in Newfoundland, you will need to use the GroupWise 5.x Appointment Time Adjuster before you apply Support Pack 3. Use the adjuster to modify future appointments scheduled outside of Newfoundland. For more information about the GroupWise Support Pack 3, see [Appendix C, “GroupWise 5.2 Support Pack 3,” on page 51](#). For more information about the GroupWise 5.x Appointment Time Adjuster, see [Appendix E, “GroupWise 5.x Appointment Time Adjuster,” on page 63](#).

## Beep On Error Set in GroupWise 4.1

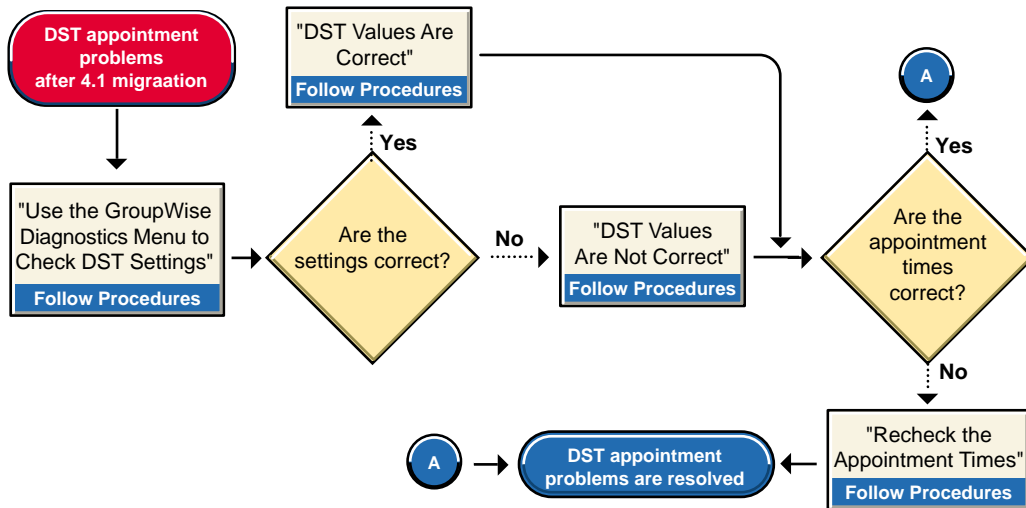
In GroupWise 4.1, the system administrator has the option of setting the administrative environment options. This is done by selecting File > Setup > Environment. One of the options, Beep On Errors, can be locked so that 4.1 client users will always receive a beep if an error is detected.

In GroupWise 5.x, this particular environment setup option was not implemented, but the code record for the option was reused for 5.x DST calculation. This means that if a 4.1 system with this locked record left intact is migrated to GroupWise 5.1 or GroupWise 5.2 (prior to Support Pack 3), the time zone record is migrated to 5.x DST calculation methods, but it cannot be unlocked. The end result is an inability to correct DST settings from a migrated 4.1 system.

To correct the problem, you should make sure that you apply the GroupWise Support Pack 3 to the 5.x system you are using during the migration. After you do this, you can change or adjust the DST settings as necessary. For more information about GroupWise Support Pack 3, see [“Obtaining and Applying the GroupWise 5.2 Support Pack 3” on page 52](#).

# Troubleshooting and Resolving 5.x DST Problems

If you suspect that Daylight Saving Time synchronization is the cause of incorrect appointments in your users' mailboxes, you need to troubleshoot in order to find the best way to correct the problem. The flowchart or "decision tree" diagram below will help you decide which troubleshooting strategy you can take to remedy these symptoms at your 5.x primary domain.



- ♦ "Using the GroupWise Diagnostics Menu to Check DST Settings" on page 28
- ♦ "DST Values Are Correct" on page 29
- ♦ "DST Values Are Not Correct" on page 30
- ♦ "Rechecking the Appointment Times" on page 32

## Using the GroupWise Diagnostics Menu to Check DST Settings

The GroupWise 4.x, 5.0, and 5.2 16-bit clients depend on the Daylight Saving Time settings made in AD.EXE or in NetWare® Administrator and saved in the domain database. The settings are made when you install or create a new domain or post office, or you can change them with the Time Zone configuration tool found in GroupWise System Operations.

The settings required for DST adjustment vary according to the version of GroupWise. If you have migrated part or all of your GroupWise 5.x system from GroupWise 4.x, the only way to check all of the current stored DST values in a domain database is by using the GroupWise Diagnostics menu, which adds diagnostic functionality to the GroupWise DLLs "snapped in" to NetWare Administrator during a GroupWise 5.x installation. Although this tool is also included in the installation, it is not readily available (or visible) until you add its string value to the Windows\* Registry.

When you enable the GroupWise Diagnostics menu, you can check a time zone record stored in a domain database to see if the current values for its Daylight Saving Time settings are correct. For details about enabling the menu and checking these values, see [Appendix B, "The GroupWise Diagnostics Menu and Time Zone Settings,"](#) on page 41.

After you use the GroupWise Diagnostics menu to check the settings, you should be able to determine whether these settings are correct or incorrect.

## **DST Values Are Correct**

If the DST values appear to be correct when you view them using the GroupWise Diagnostics menu and your users are experiencing appointment problems or their messages have an incorrect delivery time stamp, Daylight Saving Time has probably been configured incorrectly at some domain or post office.

To correct the misconfiguration, use the Time Zone configuration tool to check the following:

- ◆ Each Time Zone assigned to a domain or post office in your system must be set to the correct GMT offset.
- ◆ The Daylight Saving Time begin and end dates must be set correctly for each time zone used by a domain or post office in your system.
- ◆ The file server where a domain, a post office, a gateway, or an agent is operating must be configured with the correct time and DST settings.

For more information about configuring a time zone in GroupWise 5.2, see Chapter 4, "Customize Time Zones", in [Book 3 of the \*GroupWise 5.2 Maintenance Guide\*](#). (<http://www.novell.com/groupwise/administration/gw52/us/mbook31.html>)

## DST Values Are Not Correct

If the DST values appear to be incorrect when you view them using the GroupWise Diagnostics menu and your users are experiencing appointment problems or their messages have an incorrect delivery time stamp, you should do two things:

- ♦ Apply the GroupWise 5.2 Support Pack 3. See [“Applying the GroupWise 5.2 Support Pack 3” on page 30](#).
- ♦ Recover the primary domain database. See [“Recover the Primary Domain Database” on page 31](#).

### Applying the GroupWise 5.2 Support Pack 3

Some basic Daylight Saving Time problems that occurred in earlier versions of GroupWise, particularly with the 16-bit client, were corrected with the GroupWise Support Pack 3 (SP3). If DST values appear to be incorrect when you view them in GroupWise Diagnostics, the first thing you do is apply SP3. With the new, more robust, formula-based DST definition that originated with the 5.2 release and other DST fixes, SP3 is an excellent method to use for correcting DST problems in your GroupWise 5.2 system.

When you apply SP3, you should update all of your GroupWise 5.2 components, including the GroupWise Administrator DLLs, the GroupWise client, and the GroupWise agents.

The SP3 process requires that you update the Admin DLLs on at least one server; however, if other servers on your network store a copy of the GroupWise Admin DLLs, each of these will need to have their SYS:\PUBLIC directory updated with the SP3 process. All GroupWise administrators on your system must be using the same revision (that is, the same 5.2 Support Pack) of the Admin DLLs. The SP3 process allows you to update as many SYS:\PUBLIC directories as you need to.

**IMPORTANT:** If any GroupWise administrator on your network uses an older version of the GroupWise 5.2 Admin DLLs to administer GroupWise after SP3 has been applied anywhere in your GroupWise system, an incorrect DST date could be stored in the domain database. This will cause the incorrect appointments and time stamps if those times were established by GroupWise 4.x prior to migration.

For information about obtaining and applying SP3, and for more details about how it works, see [Appendix C, “GroupWise 5.2 Support Pack 3,” on page 51](#).

## Recover the Primary Domain Database

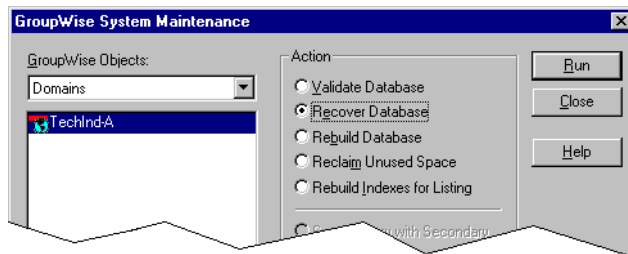
You should perform a database recover on the primary domain database of your GroupWise system if:

- ◆ You originally installed GroupWise 5.x with a GWADMN32.DLL file dated earlier than April 15, 1998, and then you migrated your GroupWise 4.x primary domain to GroupWise 5.x with that version of the GroupWise snap-in.
- ◆ Some GroupWise 4.x components are still present in the system.

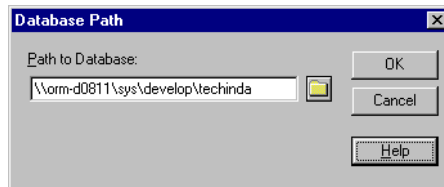
If you have already applied SP3, you can perform a database recover to ensure that the correct DST information is used by the 4.x-level components in your system. You can perform a database recover while the database is in use.

To perform the recovery:

- 1** From NetWare Administrator, select the 5.x primary domain object > click Tools > GroupWise Utilities > System Maintenance to display the GroupWise System Maintenance dialog box.



- 2** Click Recover Database > Run to display the Database Path dialog box.

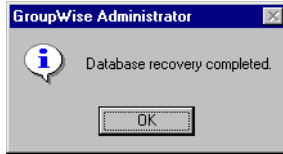


- 3** If the path to the primary domain database is incorrect, enter the correct path, then click OK to begin the recovery process.

or

If the path to the primary domain database is correct, click OK to begin the recovery process.

When the recovery is complete, the following dialog box is displayed:



**4** Click OK > Close to close the Recovery Tool dialog box.

After you have completed the database recovery, check to see if appointment times have been corrected. If some appointments are still off by one hour, you may need to use the GroupWise Appointment Time Adjuster to correct the remaining problems.

## Rechecking the Appointment Times

After you have applied SP3 and recovered the domain database, ask your users to recheck the appointment times that have been made between the following groups:

### Group A:

The "absolute date" time zone configuration group, which includes:

- ◆ All GroupWise 4.x components
- ◆ All GroupWise 5.0 components
- ◆ All GroupWise 5.1 components
- ◆ The GroupWise 5.2 16-bit client released prior to SP3

### Group B:

The "formula-based" time configuration group, which includes:

- ◆ The GroupWise 5.2 32-bit client
- ◆ The GroupWise 5.2 16-bit client (after SP3 has been applied)
- ◆ The GroupWise 5.5 16-bit client
- ◆ The GroupWise 5.5 32-bit client



If the appointment times are correctly synchronized between Group A and Group B, prior corrective steps were successful and DST problems are resolved.

If there are still differences in the appointment times between Group A and Group B in spite of prior corrective steps, or if you know the differences are caused because DST was turned off in GroupWise 4.1 before migration, you can do one of two things:

- ♦ Use the GroupWise Appointment Time Adjuster. See [“Using the GroupWise Appointment Time Adjuster” on page 33](#)
- ♦ Check and reschedule appointments. See [“Checking and Rescheduling Appointments” on page 33](#)

## Using the GroupWise Appointment Time Adjuster

The GroupWise Appointment Time Adjuster utility, ADJAPPT.EXE, is designed to help you resolve appointment times that may be off by one hour because of an incorrect DST end date setting or because of a migration from GroupWise 4.1. There are two versions of the utility, one designed to run against GroupWise 4.1 post offices where the appointments originated before the migration, and one designed to run against GroupWise 5.x post offices (those in Group A) where the appointments originated before the migration.

For more information about obtaining and using the GroupWise 4.x Appointment Time Adjuster, see [Appendix D, “GroupWise 4.x Appointment Time Adjuster,” on page 57](#).

For more information about obtaining and using the GroupWise 5.x Appointment Time Adjuster, see [Appendix E, “GroupWise 5.x Appointment Time Adjuster,” on page 63](#).

## Checking and Rescheduling Appointments

If the number of incorrect appointments is minimal or if you cannot obtain or run the GroupWise Time Adjuster utility to help you resolve appointment times, you can ask your Group A users to check and reschedule the appointments they sent before the migration.

You should have the users check and reschedule all appointments scheduled for recipients residing in any time zone. This procedure will not cause any down time for your system. For more information about rescheduling appointments, see [Appendix F, “Rescheduling Multiple Outbound Appointments,” on page 69](#).

**If you are using GroupWise 5.2:**

If the rescheduling is done after SP3 is applied and the primary domain database is recovered, the appointments should be correctly synchronized.

**If you are using GroupWise 5.5:**

The appointments should be correctly synchronized.

## When to Correct DST Problems

If you must change the Daylight Saving Time settings of a domain or a post office, the start times for appointments created before the DST reset will shift forward or backward by one hour (or the amount of change in DST). This happens if appointments are created while GroupWise DST settings are incorrect and are later corrected.

If you use GroupWise 5.2, remember that depending on the GroupWise 5.2 client being used, different DST records are accessed. A GroupWise client can use either an *absolute setting* for appointment calculation, or it can use a *formula-based setting* for appointment calculation. This inconsistency among 5.2 clients may cause some clients to experience problems while others do not. If you fix a problem at the wrong time, it may appear to introduce more problems than it solves. Use the following scenarios as a basic guide to help you determine when to correct DST problems.

### Scenario 1

If all users on a GroupWise system are currently using incorrect DST settings, you should wait to correct the problem until after DST observance has ended. In North America, for example, this would occur during the first week of November.

In this situation, all users will continue to be wrong together, so no problems should be noticed until after DST ends. At that time, you can adjust the DST settings and all new appointments will be created properly.

Note that GroupWise Remote does not use the domain database for time zone information, so appointment times that were created with the Remote client will continue to be incorrectly synchronized with real time until after you make the DST adjustments to the GroupWise domains and post offices.

## Scenario 2

If the domains or post offices of some users have correct DST settings and the domains and post offices of other users do not use the correct DST settings, the situation is more difficult. Some new appointments will be incorrect until DST settings are adjusted, but older appointments will appear to shift if you make the DST corrections.

In this situation, the choice of the best strategy depends on how many users will be affected. If 10 percent or more of the users are using incorrect DST settings, changing the settings as soon as possible may be the best way to resolve the problem. After making the change, you may have to use the GroupWise Appointment Adjuster to fix the older appointments that have shifted.



# A

## GroupWise Appointment Time Calculation

Because it can be used for communication throughout the world's time zones, a GroupWise<sup>®</sup> system must keep track of all possible time zone differences and how they are defined in its different domains and post offices. This document explains how GroupWise calculates and synchronizes these appointments.

Users depend on GroupWise to convert future appointment times across time zones so that a synchronized event (such as a telephone conference call) is scheduled to begin globally at the same instant. For instance, suppose that Daylight Saving Time is in effect. If GroupWise user in Salt Lake City, Utah (USA) schedules a telephone conference call for 3:00 p.m. local time (15:00), this means the GroupWise client for a user in Phoenix, Arizona (USA) must calculate a 2:00 p.m. local time (14:00) appointment, and the GroupWise client for a user in Berlin, Germany must calculate an 11:00 p.m. local time (23:00) appointment.

This document contains the following information about the GroupWise Appointment Time Calculation Model:

- ◆ [“How GroupWise Appointment Times Are Stored” on page 38](#)
- ◆ [“How GroupWise Appointment Times Are Converted” on page 38](#)

In addition, the document provides actual examples of these calculations:

- ◆ [“Calculation Examples: DST Off” on page 39](#)
- ◆ [“Calculation Examples: DST On” on page 40](#)

## How GroupWise Appointment Times Are Stored

The GroupWise client sending an appointment must calculate and save an appointment time in its message store. It implements the following formula:

$$(APPT - TZO) - DST = SAT$$

In this formula,

- ♦ **APPT** - Appointment start time. This variable represents the appointment start time at the time zone originating the appointment.
- ♦ **TZO** - Time Zone Offset. This variable represents the amount of offset from GMT (+ hours or - hours) at the local time zone.
- ♦ **DST** - Daylight Saving Time Offset. This variable represents the amount of time adjustment made locally for Daylight Saving Time, if it is in effect.
- ♦ **SAT** - Stored Appointment Time. This is time that the sending GroupWise client records in the message store as the scheduled occurrence of the appointment.

To apply this formula to the appointment time being stored in the example at the beginning of this appendix, we substitute the values for the variables in the equation:

$$(15:00 - (-7:00)) - 0 = 22:00$$

The stored appointment time is 22:00.

## How GroupWise Appointment Times Are Converted

The GroupWise client receiving an appointment must calculate and convert appointment times that it retrieves from the message store. It implements the following formula to convert the appointment time:

$$(SAT + TZO) + DST = RLT$$

In this formula,

- ♦ **SAT** - Stored Appointment Time. This is time that the sending GroupWise client records in the message store as the scheduled occurrence of the appointment.
- ♦ **TZO** - Time Zone Offset. This variable represents the amount of offset from GMT (+ hours or - hours) at the local time zone.

- ♦ **DST** - Daylight Saving Time Offset. This variable represents the amount of time adjustment made locally for Daylight Saving Time, if it is in effect.
- ♦ **RLT** - Resulting Local Time. This is the local time when the appointment will occur for the user who received the appointment.

Two examples of the calculation method being applied by the receiving client are included in this section. The first example shows how the calculation works when DST is off and the second example shows how the calculation works when DST is on.

## Calculation Examples: DST Off

To apply the conversion formula to the appointment being received in the example at the beginning of this appendix, we assume that the Salt Lake City user sends the appointment to another Salt Lake City user. We substitute the values for the variables in the equation:

$$(22:00 + (-7:00)) + 0 = 15:00$$

The appointment is scheduled for 15:00 (3:00 p.m.) in the Salt Lake City time zone (MST) when Daylight Saving Time is not in effect.

If the appointment is sent to a user in Phoenix, the GroupWise client uses this calculation:

$$(22:00 + (-7:00)) + 0 = 15:00$$

The appointment is scheduled for 15:00 (3:00 p.m.) in the Phoenix time zone (MST) when Daylight Saving Time is not in effect.

If the appointment is sent to a user in Berlin, the GroupWise client uses this calculation:

$$(22:00 + (+1:00)) + 0 = 23:00$$

The appointment is scheduled for 23:00 (11:00 p.m.) in the Berlin time zone (WET) when Daylight Saving Time is not in effect.

## Calculation Examples: DST On

This section elaborates on the example “[How GroupWise Appointment Times Are Stored](#)” on page 38, using an appointment sent from Salt Lake City, but this time we assume that Daylight Saving time is in effect. This means that the sending GroupWise client must first calculate the appointment time to store.

To apply the storage formula to the appointment being sent in the example above when DST is in effect, we substitute the values for the variables in the equation:

$$(APPT - TZO) - DST = SAT$$

or

$$(15:00 - (-7:00)) - 1 = 21:00$$

The stored appointment time is 21:00.

When the appointment is scheduled locally (Salt Lake City), the GroupWise client of the receiving user substitutes the calculated values for the variables in the equation:

$$(SAT + TZO) + DST = RLT$$

or

$$(21:00 + (-7:00)) + 1 = 15:00$$

The appointment is scheduled for 15:00 (3:00 p.m.) in the Salt Lake City time zone (MST) where Daylight Saving Time is in effect.

If the appointment is sent to a user in Phoenix, the GroupWise client uses this calculation:

$$(21:00 + (-7:00)) + 0 = 14:00$$

The appointment is scheduled for 14:00 (2:00 p.m.) in the Phoenix time zone (MST) where Daylight Saving Time is not in effect.

If the appointment is sent to a user in Berlin, the GroupWise client uses this calculation:

$$(21:00 + (+1:00)) + 1 = 23:00$$

The appointment is scheduled for 23:00 (11:00 p.m.) in the Berlin time zone (WET) where Daylight Saving Time is in effect.



# B

## The GroupWise Diagnostics Menu and Time Zone Settings

Novell<sup>®</sup> engineers have included a diagnostic menu for GroupWise<sup>®</sup> in NetWare<sup>®</sup> Administrator that, among other things, can help you obtain information about the time zone record of the currently connected domain database.

The GroupWise Diagnostics menu adds diagnostic functionality to NetWare Administrator. Although the menu itself is included in the GroupWise 5.x installation, it is not readily available until either its string value is added to the Windows\* Registry, or, as in the case of GroupWise 5.5, a special file is present that signals the GroupWise Administration DLLs to display the menu. When the menu is displayed, you can use it to check the time zone record for its current Daylight Saving Time settings.

This document contains information that can help you to:

- ♦ [“Adding GroupWise Diagnostics Functionality” on page 41](#)
- ♦ [“Using GroupWise Diagnostics to Check DST Settings” on page 45](#)

If you check DST settings and confirm that the settings are incorrect, you must take corrective action. For help in choosing which action you should take, see [“Recognizing DST Issues in Versions of GroupWise” on page 21](#).

### Adding GroupWise Diagnostics Functionality

The GroupWise Diagnostics menu is included as part of the GroupWise 5.x installation, during which GroupWise administrative functions are added to NetWare Administrator. By default, however, the menu is not immediately available for use. If Daylight Saving Time issues require you to use the tool, you must add this diagnostic functionality by changing the Windows Registry.

You must then restart NetWare Administrator before the GroupWise diagnostics menu is added to the NetWare Administrator Tools menu.

There are several ways to add GroupWise Diagnostics functionality to NetWare Administrator. To add the functionality to NetWare Administrator after you have installed GroupWise 5.5, create an empty text file and save it as GWSUPP.FIL at the root of the C: drive on the machine where you are running NetWare Administrator. GroupWise 5.5 is designed to poll for the existence of this file. If it exists, GroupWise Diagnostics functions are added to the NetWare Administrator Tools menu.

If you have other versions of GroupWise 5.x, there are other options for adding this functionality:

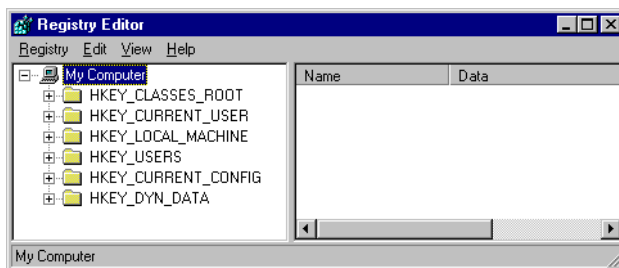
- ♦ **Modify the Windows Registry.** This option will work for all GroupWise 5.x Administration snap-ins.
- ♦ **Edit the NWADMNxx.INI File.** This option will work for GroupWise 5.0, 5.1, and 5.2.

## Modifying the Windows Registry

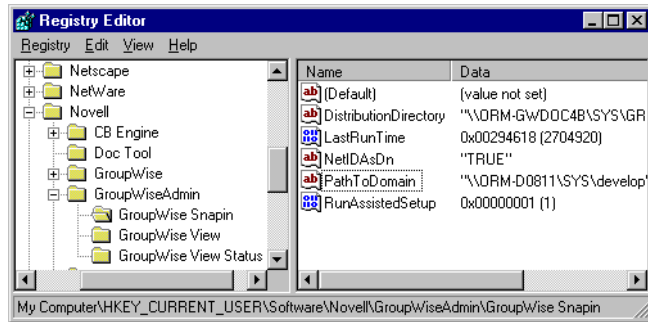
You can enable GroupWise Diagnostics by directly modifying the Windows registry of a network workstation configured to administer a GroupWise system. This is done by running the REGEDIT.EXE program and changing the string value of the GWSupport DLLs.

To modify the Windows registry:

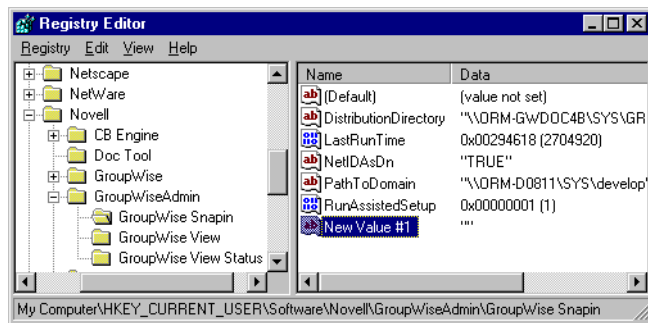
- 1** From the workstation where you have previously installed GroupWise, click Start > Programs > Windows Explorer.
- 2** From the local drive, click the \WINDOWS or \WINNT folder > double-click the REGEDIT.EXE icon to display the Registry Editor dialog box.



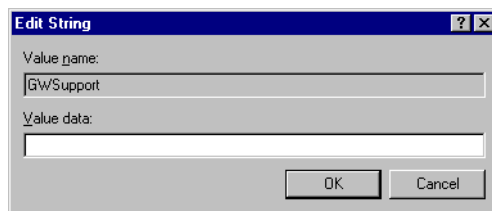
- 3 Double-click HKEY\_CURRENT\_USER > double-click Software > double-click Novell > double-click GroupWise Admin > double-click GroupWise Snapin to display the defined values for the GroupWise snapin.



- 4 Click Edit > New > String Value to add an unnamed value to the registry.



- 5 Type **GWSupport** to replace the "New Value" name. Note that whatever you type as a String Value name is not case-sensitive.
- 6 Double-click GWSupport to display the Edit String dialog box.



- 7 Type **1** in the Value Data field.

- 8 Click OK > Registry > Exit to close the registry. If NetWare Administrator was running on the machine as you edited the registry, you need to exit NetWare Administrator and then start it again so that the new GWSupport value will be recognized and the diagnostic options will become available.

## Editing the NWADMNxx.INI File

With some versions of NetWare Administrator, you can enable GroupWise Diagnostics by indirectly modifying the Windows registry of a network workstation configured to administer a GroupWise system. This is done by editing the NWADMNxx.INI file, where xx represents the platform of NetWare Administrator you are using. Among other things, this .INI file registers the .DLL files that snap in to NetWare Administrator, including GroupWise functions.

- ◆ If you have already installed GroupWise 5.0 or GroupWise 5.1 at a Windows 3.1 workstation, the NWADMN3X.INI file should already exist in the \WINDOWS directory, and you can edit this file.
- ◆ If you have already installed GroupWise 5.2 at a Windows 95/98 workstation, you must create a text file called NWADMN95.INI in the \WINDOWS directory. When the file is created, you can add the command for diagnostic functionality.
- ◆ If you installed GroupWise 5.2 at a Windows NT\* workstation, you must create a text file called NWADMNNT.INI in the \WINNT directory. When the file is created, you can add the command for diagnostic functionality.

To add the GroupWise Diagnostics functionality, open the .INI file in a text editor and add the following lines to the file:

```
[GroupWise Snapin]
GWSupport=1
```

If you are using the NWADMN3X.EXE version of NetWare Administrator, the .INI file will already contain text. If this is the case, the [GroupWise Snapin] string will already exist near the top of the file. Simply add the GWSupport=1 value on the line following this string.

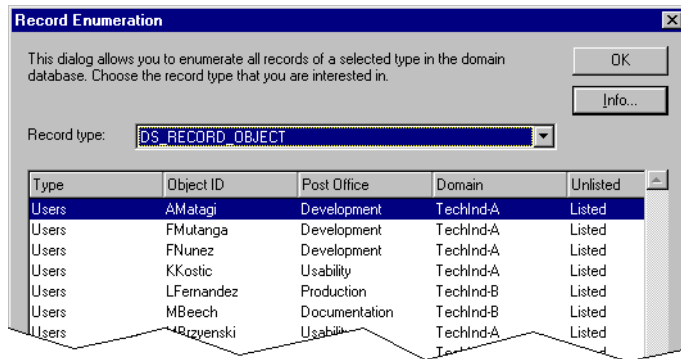
After you save the file and run NetWare Administrator (NWADMNxx.EXE) again, GroupWise Diagnostics should be available under the Tools menu.

# Using GroupWise Diagnostics to Check DST Settings

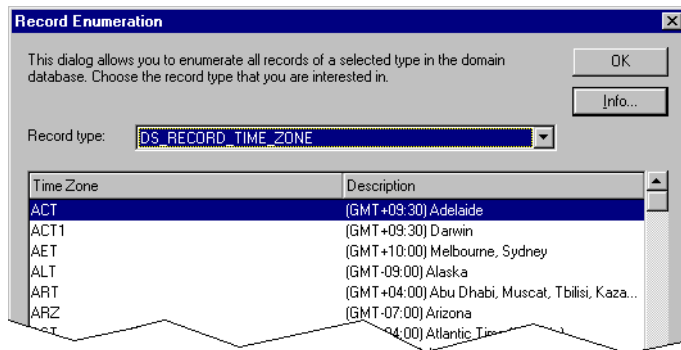
After you have added GroupWise Diagnostics functionality to the Tools menu of NetWare Administrator, you can use this tool to check a domain database time zone record for its current Daylight Saving Time settings.

To check the settings:

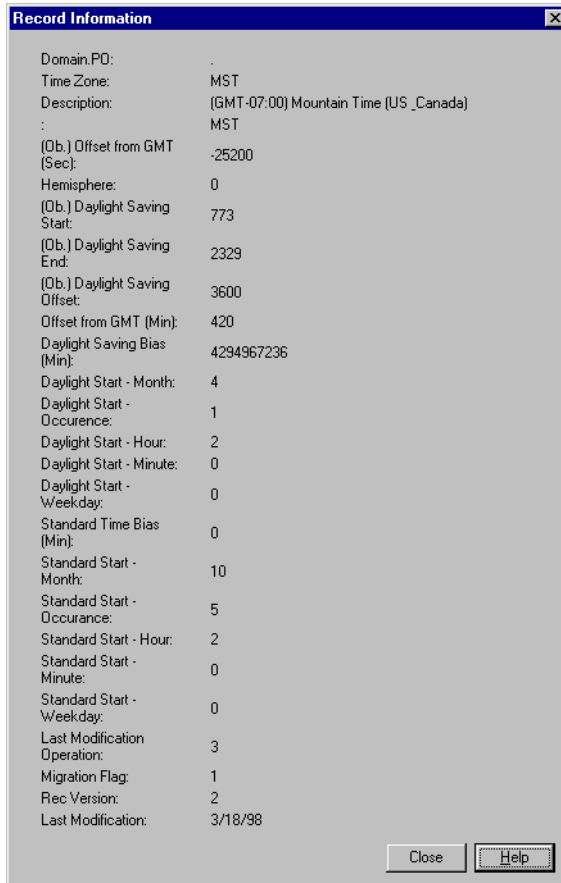
- 1 From the NetWare Administrator browser, click Tools > GroupWise Diagnostics > General Edit to display the Record Enumeration dialog box.



- 2 Open the drop-down list > click DS\_RECORD\_TIME\_ZONE to display the list of defined time zones.



- 3 Choose the time zone whose DST settings you want to check > click the Info button to display the Record Information dialog box for the time zone you have selected.



Verify that the domain database has the correct DST settings by checking the fields of the record.

**Domain.PO:** This field will be blank.

**Time Zone:** This field contains a three-character identification code for the time zone.

**Description:** This field includes the full name of the time zone, its GMT offset, areas of the world where it applies, and its three-character identification.

**(Ob.) Offset from GMT:** This field contains the value of the GMT offset as measured in seconds. This is a GroupWise 4.x setting.

**Hemisphere:** This field contains a numeric value to indicate the hemisphere of the world where the time zone applies. Zero (0) indicates the northern hemisphere. One (1) indicates the southern hemisphere.

**(Ob.) Daylight Saving Start:** This field contains the starting date code for Daylight Saving Time as defined in GroupWise 4.x. To read this code,

1. Convert the code to hexadecimal format.
2. Parse the hex number into two parts. The first digit represents the month value; the last two digits represent the day of the month value.
3. Convert the hex values to decimal values.

For example, if the field contains the code 773:

1. Convert 773 to hexadecimal format, which yields a value of 305.
2. Parse 305 into 3 and 05.
3. Convert the 3 hex value to 3 decimal value > convert the 05 hex value to 5 decimal value.

The first decimal value represents the month; month values begin with January as zero (0). The second decimal value represents the day of the month; day of the month values begin with 1. Using the 3 and 5 decimal values, we have the date: April 5.

If you are having DST problems with appointment times in the 4.x, 5.0, 5.1, or the 5.2 (16-bit only) clients, double-check this value.

**(Ob.) Daylight Saving End:** This field contains the ending date code for Daylight Saving Time as defined in GroupWise 4.x. To read this code,

1. Convert the code to hexadecimal format.
2. Parse the hex number into two parts. The first digit represents the month value; the last two digits represent the day of the month value.
3. Convert the hex values to decimal values.

For example, if the field contains the code 2329:

1. Convert 2329 to hexadecimal format, which yields a value of 919.
2. Parse 919 into 9 and 19.
3. Convert the 9 hex value to 9 decimal value > convert the 19 hex value to 25 decimal value.

The first decimal value represents the month; month values begin with January as zero (0). The second decimal value represents the day of the

month; day of the month values begin with 1. Using the 9 and 25 decimal values, we have the date: October 25.

If you are having DST problems with appointment times in the 4.x, 5.0, 5.1, or the 5.2 (16-bit only) clients, double-check this value.

**(Ob.) Daylight Saving Offset:** This field contains the value of the DST offset as measured in seconds. This is a GroupWise 4.x setting.

If you are having DST problems with appointment times in the 4.x, 5.0, 5.1, or the 5.2 (16-bit only) clients, double-check this value.

**Offset from GMT (Min):** This field contains the value of the GMT offset as measured in minutes. This is a GroupWise 5.x setting.

**Daylight Savings Bias (Min):** Not applicable for administrators. Used for code testing.

**Daylight Start - Month:** This field contains the month of the year when Daylight Saving Time starts. This is a GroupWise 5.x setting.

**Daylight Start - Occurrence:** This field correlates with the Daylight Start - Weekday field (DSW), which is explained below. The value in this field specifies which occurrence of DSW will begin Daylight Saving Time. A value of 1 designates the first occurrence of DSW in the month as the DST start day, a value of 2 designates the second occurrence of that day in the month, and so on. The values range from 1 to 5. This is a GroupWise 5.x setting.

**Daylight Start - Hour:** This field contains the hour of the day when Daylight Saving Time starts. The first hour is numbered 1, the second hour by 2, and so forth. This is a GroupWise 5.x setting.

**Daylight Start - Minute:** This field contains the minute of the hour when Daylight Saving Time starts. This is a GroupWise 5.x setting.

**Daylight Start - Weekday:** This field indicates the day of the week when Daylight Saving Time starts. Sunday is represented by 0, Monday is 1, Tuesday is 2, Wednesday is 3, Thursday is 4, Friday is 5, and Saturday is 6. This is a GroupWise 5.x setting.

**Standard Time Bias (Min):** This field contains the value of Standard Time bias, as measured in minutes.

**Standard Start - Month:** This field contains the month of the year when Standard Time starts. This is a GroupWise 5.x setting.

**Standard Start - Occurrence:** This field correlates with the Standard Start - Weekday field (SSW), which is explained below. The value in this



field specifies which occurrence of SSW will begin Standard Time. A value of 1 designates the first occurrence of SSW in the month as the Standard Time start day, a value of 2 designates the second occurrence of that day in the month, and so on. The values range from 1 to 5. This is a GroupWise 5.x setting.

**Standard Start - Hour:** This field contains the hour of the day when Standard Time starts. The first hour (1:00 a.m.) is numbered 1, the second hour by 2, and so forth. This is a GroupWise 5.x setting.

**Standard Start - Minute:** This field contains the minute of the hour when Standard Time starts. This is a GroupWise 5.x setting.

**Standard Start - Weekday:** This field indicates the day of the week when Standard Time starts. Sunday is represented by 0, Monday is 1, Tuesday is 2, Wednesday is 3, Thursday is 4, Friday is 5, and Saturday is 6. This is a GroupWise 5.x setting.

**Last Modification Operation:** This field contains a code that indicates the type of modification operation performed on the database.

**Migration Flag:** This field contains a code indicating whether this domain database has been migrated from GroupWise 4.1

**Rec Version:** This field contains a code indicating the version of this domain database record.

**Last Modification:** This field contains the month, day, and year of the last modification to this domain database.



# C

## GroupWise 5.2 Support Pack 3

When you install GroupWise® on a NetWare® 4.1x server, you not only extend the schema of the NDS® tree where GroupWise objects will be logically located, you also add GroupWise functionality to NetWare Administrator so that you can administer GroupWise as a "snap-in" to that program. This functionality, visible as added menu options and dialog boxes, is possible because the installation adds several GroupWise-specific Dynamic Link Libraries (DLLs) to the SYS:\PUBLIC directory on the Windows\* workstation where you run NetWare Administrator.

When you run NetWare Administrator on this workstation, it knows that it must "snap in" or load the GroupWise Administration DLLs by checking a Windows registry setting. On a Windows 95/98 or Windows NT\* machine running a GroupWise 5.2 installation, this registry setting is located at

```
HKEY_CURRENT_USER\Software\NetWare\Parameters\NetWare  
Administrator\Snapin View DLLs WIN95
```

Here, the registry points to a file that represents the core GroupWise Administration DLL, GWADMA32.DLL. NetWare Administrator looks for this file in the same directory from which it (that is, NetWare Administrator itself) is launched. Note that you can configure any Windows workstation to run NetWare Administrator and GroupWise 5.2 by running SETUPGW.EXE. This utility registers the correct DLLs for the workstation. SETUPGW.EXE is available in the software distribution directory \ADMIN directory.

If you determine that your GroupWise 5.2 system is having problems correlating appointments because of Daylight Saving Time (DST) inaccuracies, you should update all of your GroupWise 5.2 components, including the GroupWise snap-in, GroupWise clients, and GroupWise agents. The most current update for GroupWise 5.2 is called the GroupWise Support Pack 3 (SP3). This "patch" corrects a number of 5.2 issues, and its update code also helps correct a deficiency in DST calculation.

If SP3 is to be effective, all of the administrators in your GroupWise system must use the same revision of the GroupWise snap-in. The SP3 process requires you to update the snap-in on at least one server; however, you must also update the SYS:\PUBLIC directory all other servers that store a copy of the GroupWise snap-in. The patch process for SP3 and later will allow an administrator to update as many SYS:\PUBLIC directories as needed.

If you apply SP3 to GroupWise 5.2 components on one server, and then you subsequently use a non-patched version of the 5.2 snap-in to administer GroupWise, an incorrect DST date could be stored in the domain database. This could cause GroupWise 4.x appointments and time stamps to be incorrect. To correct the problem, unload all of the agents and gateways, apply SP3 on the unpatched server, then restart all of the agents and gateways.

You can determine whether SP3 has been previously applied to your GroupWise system by checking the creation date of a file located in the \ADMIN\PUBLIC subdirectory of the software distribution directory. The file, GWADMA32.DLL, will have a creation date of 4/15/98 or later if SP3 has been applied to this directory. Note that not all files in the directory may have the same date.

The remainder of this section contains information that will help you apply the GroupWise 5.2 Support Pack 3 in the situation that is best for you:

- ◆ **“Obtaining and Applying the GroupWise 5.2 Support Pack 3”** on page 52 lists the steps for the complete application of SP3.
- ◆ **“Performing Manual SP3 Updates to Admin DLLs Only”** on page 55 lists only the steps for applying SP3 to the GroupWise administration DLLs but not the steps for applying it to GroupWise clients or agents.

## Obtaining and Applying the GroupWise 5.2 Support Pack 3

Depending on the current state of the software distribution directory on a file server, several different files may be required for a complete application of SP3. Because this variability of file combinations, Novell has created a Download Assistant tool to examine the files in a specified software distribution directory and then download the correct SP3 files.

The SP3 Download Assistant, GW52SP3A.EXE, is available for download from the World Wide Web as a self-extracting, compressed file. Once downloaded and executed, the Download Assistant determines which

GroupWise 5.2 CD was used to initially install GroupWise. Once this is discovered, the assistant launches your web browser and finds the file download location of the SP3 code specifically designed to update the your version of GroupWise 5.2.

To obtain and apply the GroupWise 5.2 Support Pack 3:

- 1** Obtain the SP3 Download Assistant from the [Novell Support Connection Worldwide Sites®](http://www.support.novell.com/misc/worldwide.htm) (<http://www.support.novell.com/misc/worldwide.htm>). Use the File Finder to search for GW52SP3.
- 2** Copy this file to a temporary directory and run it to extract the enclosed files.
- 3** When the extraction is complete, double-click the SETUP.EXE file to run the SP3 Download Assistant. The process launches your Internet browser to the download site of the SP3 image set that you need.
- 4** At the SP3 download site, follow the directions to download the appropriate SP3 image set.
- 5** From the directory where you downloaded the SP3 image set, double-click the program executable to apply SP3 to a single software distribution directory.

The program launches the SP3 wizard, which displays a dialog box with the following buttons:

**Update Admin Files.** When you run the SP3 wizard on a Windows 95/98 workstation and click Update Admin Files, the wizard prompts you for the path to the NetWare SYS:\PUBLIC directory of that server, then copies the patched Admin DLLs from the software distribution directory to the PUBLIC\WIN95 directory and the PUBLIC\WIN95\NLS\LANGUAGE directory. If you run the wizard on a Windows NT machine, it copies patched DLLs to the PUBLIC\WINNT directory and the PUBLIC\WINNT\NLS\LANGUAGE directory.

If you launch NetWare Administrator from directories other than the one you specify, make sure that each of these directories is removed or patched with SP3 code. Failure to do so can cause problems with Daylight Saving Time settings. You can choose this option as many times as necessary to patch GroupWise Administrator DLLs.

If, during the SP3 update, you fail to apply the Update Admin Files option to every SYS:/PUBLIC directory of every file server where you run the NetWare Administrator, you must distribute the patched DLLs manually.

For information about how to do this, see “[Performing Manual SP3 Updates to Admin DLLs Only](#)” on page 55.

**Update Agent Files.** If you choose this option, the SP3 wizard launches the INSTALL.EXE program from the *software\AGENTS* directory that was patched. Although you can run this program later, the SP3 wizard automates the process for you.

**Update Internet Agent Files.** If you choose this option, the SP3 wizard launches the SETUP.EXE program from the *software\INTERNET\GWIA* directory that was patched. Although you can run this program later, the SP3 wizard automates the process for you.

**Update WebAccess Agent Files.** If you choose this option, the SP3 wizard launches the SETUP.EXE program from the *software\INTERNET\WEBACCES* directory that was patched. Although you can run this program later, the SP3 wizard automates the process for you.

**Force Auto-Update for Windows Clients.** If you choose this option, the SP3 wizard launches instructions on how to use the GroupWise Auto-Update feature to push the GroupWise client out to user’s desktops, thus forcing users to update their Windows clients. You can perform an auto-update manually at any time. For more information, see the *System Update* guide.

Note that if your GroupWise system has more than one software distribution directory, you can copy the contents of this directory to other directories. See [Step 8](#) for more information.

- 6** Run the Installation Advisor from the patched software distribution directory to install updated GroupWise software.

You need to reinstall new software for all GroupWise components. For more information about updating an installation, see the *System Update* guide.

- 7** Restart the patched GroupWise agents. The GroupWise agents are not patched until they have been unloaded and reloaded. Copying the agents to the \SYSTEM directory does not automatically replace what is already in memory. Make sure you install the agents to every server that is running GroupWise agents.

Note that you can determine whether an agent on a NetWare server is running the 5.2 SP3 code by going to a NetWare file server system console prompt and typing `modules`. The version display should specify version 5.20 and should be dated 4/15/98 or later.

## **8** Copy SP3 to all other software distribution directories.

The SP3 wizard applies the patch to only one software distribution directory at a time. If there is more than one such directory in your GroupWise system, you should copy the patched directory to overwrite the other directories; otherwise, you must apply SP3 to each directory independently.

There are two ways to accomplish an update to the software distribution directory.

- ◆ Use the Software Directory Management tool. Although effective, this method also prompts users to update the client software, which you may not choose to do. For more information about this tool, see "[Updating a Software Distribution Directory](#)" in "[Updating Your GroupWise System](#)" in the *System Update* guide.
- ◆ Rename the old directory, then copy it and its subdirectories to the path where the old directory was located. To save time, you can use the XCopy utility to perform the copy (`xcopy /s /e`).

This copying method will not work if any user is using GroupWise or any GroupWise utility.

## **Performing Manual SP3 Updates to Admin DLLs Only**

If, during the SP3 update, you failed to apply the Update Admin Files option to every SYS:\PUBLIC directory of every file server where you run the NetWare Administrator, you will have to distribute the patched DLLs manually. This is also a good update method for administrators who want to save time by applying SP3 to the Admin snap-in DLLs only, not to the client or to the agents.

To manually update the Admin DLLs:

- 1** Select a GroupWise software distribution directory where SP3 has been applied.

You can confirm this by going to the \ADMIN\PUBLIC subdirectory and checking the date of the GWADMA32.DLL file. If the file is dated 4/15/98 or later, SP3 has been applied.

- 2** Confirm that a file server needs SP3 by checking the creation date of GWADMA32.DLL, located in the SYS:\PUBLIC\WINxx directory. If the file is dated prior to 4/15/98, proceed to step 3.

- 3** Copy all of the files from the *software*\ADMIN\PUBLIC directory located at the patched file server to the SYS:\PUBLIC\WINxx directory of the non-patched file server.
- 4** Copy all of the files from the *software* \ADMIN\PUBLIC\NLS\language directory located at the patched server to the SYS:PUBLIC\WINxx\NLS\language directory of the non-patched file server.
- 5** Repeat steps 2 through 4 for each file server that will run the GroupWise snap-in DLLs.



# D

## GroupWise 4.x Appointment Time Adjuster

The GroupWise® 4.x Appointment Time Adjuster (ATA) version 1.5 (ADJAPPT.EXE) modifies appointment times that may be incorrect by one hour due to an incorrect DST end date setting, or due to a problem created by migrating the GroupWise 4.1 primary domain to GroupWise 5.2.0.

### Understanding This Utility

The time adjuster program, which can be run on only one 4.x post office at a time, is designed to allow the GroupWise system administrator to:

- ◆ Determine and set a time offset that can be applied to move appointment times forward or backward.
- ◆ Select appointments to be modified by specifying an exact date or a range of dates when the appointments were created.
- ◆ Exclude modification of some appointments based on the post office or group of post offices from which they were sent.

The amount of time needed to run the appointment time adjuster on one 4.x post office will vary according to:

- ◆ The number of appointments falling within the specified date ranges.
- ◆ The total number of records in the message store databases.
- ◆ The network connection (LAN or WAN) between the workstation running the ATA and the file server where the post office resides.

If you want to use the appointment time adjuster, you will need to perform the following tasks:

- ♦ “Obtaining and Installing the 4.x Appointment Time Adjuster” on page 58
- ♦ “Preparing to Run the 4.x Appointment Time Adjuster” on page 58
- ♦ “Running the 4.x Appointment Time Adjuster” on page 59

You may also be interested in the section entitled “Tips for Using the 4.x Appointment Time Adjuster” on page 61.

## Obtaining and Installing the 4.x Appointment Time Adjuster

The GroupWise 4.x Appointment Time Adjuster is available as a self-extracting, compressed file, GWATA415.EXE. The file is available for download from the [Novell Support Connection® Worldwide Sites \(http://www.support.novell.com/misc/worldwide.htm\)](http://www.support.novell.com/misc/worldwide.htm) Use the File Finder to search for GWATA415.

Copy this file to a temporary directory and run it to extract the enclosed files.

## Preparing to Run the 4.x Appointment Time Adjuster

Before you use the GroupWise 4.x Appointment Time Adjuster, you should run the most current version of the GroupWise 4.1 OFCHECK.EXE program against all user and message databases in the post office. Running the Analyze/Fix Structure option in OFCHECK.EXE will help to prevent a General Protection Fault when you use the appointment adjuster. After you run OFCHECK.EXE, you should also make a complete backup of your entire GroupWise system. For more information about OFCHECK.EXE, see the [GroupWise 4.1 Administration Guide \(http://www.novell.com/groupwise/administration/gw41/gwadmn.html\)](http://www.novell.com/groupwise/administration/gw41/gwadmn.html).

Because the appointment time adjuster works on only one post office at a time, you should close the post office, make sure the message queues are empty, and then stop the 4.x OFS process for the post office you will be adjusting. You will find the message queues for the post office in the *post\_office*\WPCSOUT\ and *post\_office*\WPCSIN\ directories and their subdirectories. For more information about the GroupWise 4.1 directory structure, see the [GroupWise](#)

4.1 *Administration Guide* (<http://www.novell.com/groupwise/administration/gw41/gwadmn.html>).

After you close the post office, you should make a copy of the entire post office directory before you start the ATA. This will make it easier for you to restore the post office if appointments are not correctly adjusted. If the post office is closed, you can copy the backup to the post office location on the server.

As part of the task of adjusting appointments, you may also want to identify a GroupWise user that is experiencing the appointment problem you want to correct. After you close the post office, make a backup, and run the ATA, you can examine this user's appointments (after obtaining permission) to verify whether the problem has been corrected. If your examination reveals that the appointments are still incorrect, you can restore the post office from your backup. When you are confident the appointment times have been corrected properly, you can open the post office again.

## Running the 4.x Appointment Time Adjuster

When you have installed the appointment time adjuster (ATA), you can start the program using the following syntax:

```
AdjAppt path_to_post_office [+ or -]offset_in_hours  
[switches]
```

Remember that the ATA only works on one 4.x post office at a time. You must indicate the mapped path to this post office. You must also indicate in the command line the amount of time offset (in hours) with which the appointments should be modified. The ATA will modify all appointment times forward or backward according to the amount of offset you indicate. The offset must be preceded with a plus (+) or minus (-) to be valid. The following formats can be used:

- ◆ +1 adjust appointments forward 1 hour
- ◆ +0.5 adjust appointments forward 1/2 hour
- ◆ +1.5 adjust appointments forward 1-1/2 hours
- ◆ +1,5 adjust appointments forward 1-1/2 hours
- ◆ +1:30 adjust appointments forward 1-1/2 hours
- ◆ +30m adjust appointments forward 1/2 hour
- ◆ +1h30m adjust appointments forward 1-1/2 hours

By using startup switches, you can also specify the dates of the appointments that you want to modify, or specify the user ID of a sender whose appointments you suspect of a DST error. Startup switches will also let you exclude adjustment to the appointments that have been sent from a particular post office or group of post offices to users in the post office you are adjusting. Note that the **nocreateupdate** switch is mandatory.

See [Appendix G, “Startup Switches,” on page 73](#) for a list of startup switches and explanations of how they are used.

## Startup Examples

To assist you with understanding how these startup options can be used with the 4.x adjuster, study the following scenarios.

### Scenario 1

The administrator has a GroupWise system spread across several time zones. She wants to make adjustments to appointments based on the following criteria:

- ◆ Affected appointments must have been created by users in a post office having an incorrect DST end date.
- ◆ Appointments created by users in post offices with the correct DST End date must be excluded from modification. The Berlin post office has the correct end date.
- ◆ Affected appointments must have been created prior to correcting the DST end date on September 24, 1997.
- ◆ Affected appointments must have been scheduled for dates between October 1 and October 25, 1997.
- ◆ Affected appointments need to be move backward one hour.

The syntax to accomplish this modification would be:

```
ADJAPPT.EXE drive:\path_to_po_dir -1 /ce-98/09/24 /as-98/10/01 /ae-98/10/25 /nocreateupdate /ex-berlin
```

To carry out this command, the 4.x Appointment Time Adjuster ignores any appointments created by users in the Berlin post office, but checks the appointments in all other post offices. If there are appointments created on September 24, 1998 or earlier, and if those appointments are scheduled to occur any day between and including October 1, 1998 and October 25, 1998, the starting times of those appointments will be shifted to one hour earlier.

## Scenario 2

The administrator has a GroupWise system spread across several time zones. She wants to make adjustments to appointments based on the following criteria:

- ◆ Affected appointments must have been created by users in a post office having an incorrect DST end date. Several post offices have the correct end date. She lists them in a host exclusion file.
- ◆ Appointments created by users in post offices with the correct DST end date must be excluded from modification.
- ◆ Affected appointments must have been created prior to correcting the DST end date on September 24, 1998.
- ◆ Affected appointments must have been scheduled for dates between October 1 and October 25, 1998.
- ◆ Affected appointments need to be move backward one hour.

The syntax to accomplish this modification would be:

```
ADJAPPT.EXE drive:\path_to_po_dir -1 /ce-98/09/24 /as-98/10/01 /ae-98/10/25 /nocreateupdate /ex-@drive:\path\hosts.txt
```

To carry out this command, the 4.x Appointment Time Adjuster ignores any appointments created by users listed in the host exclusion file, but checks the appointments in all other remaining post offices in the system. If there are appointments created on September 24, 1998 or earlier, and if those appointments are scheduled to occur any day between and including October 1, 1998 and October 25, 1998, the starting times of those appointment will be shifted to one hour earlier.

## Tips for Using the 4.x Appointment Time Adjuster

The GroupWise 4.x Appointment Time Adjuster does not check to determine if its process has previously been run on a post office: every time you run the program, the appointments in the post office are modified according to the specified command line settings. This means that if the command line settings are not changed, the time offset continues to shift.

You can use this no-check design to your advantage. If you need to reverse a change you made, you can change the offset from + to - or from - to +. This procedure works only if you also use the `/nocreateupdate` startup switch.



# E

## GroupWise 5.x Appointment Time Adjuster

The GroupWise® 5.x Appointment Time Adjuster version 1.5 (ADJAPPT.EXE) modifies appointment times that may be incorrect by one hour due to an incorrect DST end date setting, or due to a problem created by migrating the GroupWise 4.1 primary domain to GroupWise 5.2.0.

### Understanding This Utility

The time adjuster program, which can be run on only one 5.0, 5.1, or 5.2 post office at a time, is designed to allow the GroupWise system administrator to:

- ◆ Determine and set a time offset that can be applied to move appointment times forward or backward.
- ◆ Select appointments to be modified by specifying an exact date or a range of dates when the appointments were created.
- ◆ Exclude modification of some appointments based on the post office or group of post offices from which they were sent.

The amount of time needed to run the appointment time adjuster (ATA) on one post office will vary according to:

- ◆ The number of appointments falling within the specified date ranges.
- ◆ The total number of records in the message store databases.
- ◆ The network connection (LAN or WAN) between the workstation running the ATA and the file server where the 5.x post office resides.

If you want to use this tool, you will need to perform the following tasks:

- ♦ “Obtaining and Installing the 5.x Appointment Time Adjuster” on page 64
- ♦ “Preparing to Run the 5.x Appointment Time Adjuster” on page 64
- ♦ “Running the 5.x Appointment Time Adjuster” on page 65

You may also be interested in the section entitled “Tips for Using the 5.x Appointment Time Adjuster” on page 67.

## Obtaining and Installing the 5.x Appointment Time Adjuster

The GroupWise 5.x Appointment Time Adjuster is available as a self-extracting, compressed file, GWATA515.EXE. The file is available for download from the [Novell Support Connection® Worldwide Sites \(http://www.support.novell.com/misc/worldwide.htm\)](http://www.support.novell.com/misc/worldwide.htm). Use the File Finder to search for GWATA515.

Copy this file to a temporary directory and run it to extract the enclosed files.

## Preparing to Run the 5.x Appointment Time Adjuster

Before you use the GroupWise 5.x Appointment Time Adjuster, you should run the most current version of the GroupWise 5.x GWCHECK.EXE program against all user and message databases in the post office. Running the Analyze/Fix Structure option in GWCHECK.EXE will help to prevent a General Protection Fault when you use the appointment adjuster. After you run GWCHECK.EXE, you should also make a complete backup of your entire GroupWise system. For more information about the GWCHECK.EXE utility, see “Stand-Alone Maintenance Programs” in the *Maintenance* guide. Note that this information is also pertinent for GroupWise 5.2.

Because the ATA works on only one post office at a time, you should close the post office, make sure the message queues are empty, and then stop the 5.x POA process for the post office you will be adjusting. You will find the message queues for the post office in the *post\_office*\WPCSOUT\ and *post\_office*\WPCSIN\ directories and their subdirectories. For more information about the GroupWise 5.x directory structure, see “Directory Structure Diagrams” in the *Troubleshooting 3: Message Flow and Directory Structure* guide.



After you close the post office, you should make a copy of the entire post office directory before you start the ATA. This will make it easier for you to restore the post office if appointments are not correctly adjusted. If the post office is closed, you can copy the backup to the post office location on the server.

As part of the task of adjusting appointments, you may also want to identify a GroupWise user that is experiencing the appointment problem you want to correct. After you close the post office, make a backup, and run the ATA, you can examine this user's appointments (after obtaining permission) to verify whether the problem has been corrected. If your examination reveals that the appointments are still incorrect, you can restore the post office from your backup. When you are confident the appointment times have been corrected properly, you can open the post office again.

## Running the 5.x Appointment Time Adjuster

When you have installed the appointment time adjuster (ATA), you can start the program using the following syntax:

```
AdjApt path_to_post_office [+ or -] offset_in_hours  
[switches]
```

Remember that the ATA only works on one 5.x post office at a time. You must indicate the mapped path to this post office. You must also indicate in the command line the amount of time offset (in hours) with which the appointments should be modified. The ATA will modify all appointment times forward or backward according to the amount of offset you indicate. The offset must be preceded with a plus (+) or minus (-) to be valid. The following formats can be used:

- ◆ +1 adjust appointments forward 1 hour
- ◆ +0.5 adjust appointments forward 1/2 hour
- ◆ +1.5 adjust appointments forward 1-1/2 hours
- ◆ +1,5 adjust appointments forward 1-1/2 hours
- ◆ +1:30 adjust appointments forward 1-1/2 hours
- ◆ +30m adjust appointments forward 1/2 hour
- ◆ +1h30m adjust appointments forward 1-1/2 hours

By using startup switches, you can also specify the dates of the appointments that you want to modify, or specify the user ID of a sender whose

appointments you suspect of a DST error. Startup switches will also let you exclude adjustment to the appointments that have been sent from a particular post office or group of post offices to users in the post office you are adjusting. Note that the **nocreateupdate** switch is mandatory.

See [Appendix G, “Startup Switches,” on page 73](#) for a listing of startup switches and explanations of how they are used.

## Startup Examples

To assist you with understanding how these startup options can be used with the 5.x adjuster, study the following scenarios.

### Scenario 1

The administrator has a GroupWise system spread across several time zones. She wants to make adjustments to appointments based on the following criteria:

- ◆ Affected appointments must have been created by users in a post office having an incorrect DST end date.
- ◆ Appointments created by users in post offices with the correct DST End date must be excluded from modification. The Berlin post office has the correct end date.
- ◆ Affected appointments must have been created prior to correcting the DST end date on September 24, 1997.
- ◆ Affected appointments must have been scheduled for dates between October 1 and October 25, 1997.
- ◆ Affected appointments need to be move backward one hour.

The syntax to accomplish this modification would be:

```
ADJAPPT.EXE drive:\path_to_po_dir -1 /ce-98/09/24 /as-98/10/01 /ae-98/10/25 /nocreateupdate /ex-berlin
```

To carry out this command, the 5.x Appointment Time Adjuster ignores any appointments created by users in the Berlin post office, but checks the appointments in all other post offices. If there are appointments created on September 24, 1998 or earlier, and if those appointments are scheduled to occur any day between and including October 1, 1998 and October 25, 1998, the starting times of those appointments will be shifted to one hour earlier.

## Scenario 2

The administrator has a GroupWise system spread across several time zones. She wants to make adjustments to appointments based on the following criteria:

- ◆ Affected appointments must have been created by users in a post office having an incorrect DST end date. Several post offices have the correct end date. She lists them in a host exclusion file.
- ◆ Appointments created by users in post offices with the correct DST end date must be excluded from modification.
- ◆ Affected appointments must have been created prior to correcting the DST end date on September 24, 1998.
- ◆ Affected appointments must have been scheduled for dates between October 1 and October 25, 1998.
- ◆ Affected appointments need to be move backward one hour.

The syntax to accomplish this modification would be:

```
ADJAPPT.EXE drive:\path_to_po_dir -1 /ce-98/09/24 /as-98/10/01 /ae-98/10/25 /nocreateupdate /ex-@drive:\path\hosts.txt
```

To carry out this command, the 5.x Appointment Time Adjuster ignores any appointments created by users listed in the host exclusion file, but checks the appointments in all other remaining post offices in the system. If there are appointments created on September 24, 1998 or earlier, and if those appointments are scheduled to occur any day between and including October 1, 1998 and October 25, 1998, the starting times of those appointment will be shifted to one hour earlier.

## Tips for Using the 5.x Appointment Time Adjuster

### 5.x Post Offices Not Checked for Previous Adjuster Use

The GroupWise 5.x Appointment Time Adjuster does not check to determine if its process has previously been run on a post office: every time you run the program, the appointments in the post office are modified according to the specified command line settings. This means that if the command line settings are not changed, the time offset continues to shift.

You can use this no-check design to your advantage. If you need to reverse a change you made, you can change the offset from + to - or from - to +. This procedure only works if you also use the `/nocreateupdate` startup switch.

## Checking the Client Versions Running Against the Post Office

If the GroupWise 5.2 Service Pack 3 (SP3) has not been applied to the GroupWise 5.2 16-bit client, it will continue to use an absolute time value for calculating Daylight Saving Time. The same is true of GroupWise 5.2 32-bit clients that are not patched with SP3. If the post office that you are adjusting services a combination of GroupWise 5.2 32-bit clients and the GroupWise 5.2 16-bit clients, you must be aware of the version of these clients. You need to adjust only the appointments sent by clients that have not had the SP3 patch applied.

You must run the ATA at the post office of every non-SP3 user and you must run it a second time against every post office to which that user sent an appointment. If this will require an excessive number of sessions with the appointment time adjuster, it may be to your advantage to require users to reschedule appointments rather than to use the appointment adjuster. For more information about rescheduling appointments, see [Appendix F, “Rescheduling Multiple Outbound Appointments,”](#) on page 69.

# F

## Rescheduling Multiple Outbound Appointments

If the number of outgoing appointments affected by DST changes is minimal, or if you cannot obtain or run the GroupWise® Appointment Time Adjuster utility to help you resolve appointment times, you may ask your GroupWise users to check and reschedule the appointments they have sent for recipients residing in any time zone. This procedure will not cause any down time for your system.

If users must reschedule a number of appointments, it would be impractical for them to look through their calendars for appointments they have sent. Instead, they can set up filters in their 4.x or 5.x versions of the GroupWise to retrieve their outbound appointments. Once these appointments are retrieved, they can then be rescheduled as needed.

This document contains information about the filtering and rescheduling process necessary for the following GroupWise clients:

- ♦ “GroupWise 4.1 Client for Windows” on page 70
- ♦ “GroupWise 4.1 Client for DOS” on page 70
- ♦ “GroupWise 4.1 Client for Macintosh” on page 71
- ♦ “GroupWise 5.x 32-bit Client” on page 71

## GroupWise 4.1 Client for Windows

The GroupWise 4.1 Client for Windows\* lets a user retrieve a list of all of the appointments sent from his or her mailbox. To retrieve the list:

- 1** Double-click the Out Box in the Main Window > click Out Box to select it for filtering.
- 2** Click View > Filter to open the Filter dialog box.
- 3** Select Appointment to display a list box of all outgoing appointments.

To reschedule and resend each appointment:

- 1** Click the appointment from the appointment list box.
- 2** Click Send > Resend > check the appointment time and change it if necessary.
- 3** Click Send. You will be prompted to retract the original appointment.
- 4** Click Yes to retract the original appointment.
- 5** Repeat steps 1-4 for every appointment you want to reschedule.

Note that the GroupWise 4.1 Client for Windows is designed to run on a 16-bit operating system. The user interface for this 16-bit client is very similar to the interface for the GroupWise 5.x 16-bit client. If your users have the 5.x 16-bit client, they can use the instructions for appointment rescheduling that are provided here for the 4.1 Windows client.

## GroupWise 4.1 Client for DOS

The GroupWise 4.1 Client for DOS lets a user retrieve a list of all of the appointments sent from his or her mailbox. To retrieve the list:

- 1** Choose the Window menu, then choose Out Box to select it for filtering.
- 2** Choose Views, then choose Filters to open the Filter dialog box.
- 3** Select Appointment to display a list box of all outgoing appointments.

To reschedule and resend each appointment:

- 1** Choose the appointment from the appointment list box.
- 2** Choose the Send menu, then choose Edit/Resend to display the Resend dialog box.

- 3** Choose Delete and Resend to retract the original item and reschedule a new item.
- 4** Choose OK.
- 5** Make the necessary changes to the appointment, then choose Send.
- 6** Repeat steps 1-5 for every appointment you want to reschedule.

## GroupWise 4.1 Client for Macintosh

The GroupWise 4.1 Client for Macintosh\* lets a user retrieve a list of all of the appointments sent from his or her mailbox. To retrieve the list:

- 1** Double-click the Out Box in the Main Window.
- 2** Click Tools > Filter to open the Filter dialog box.
- 3** Select Appointment to display a list box of all outgoing appointments.


To reschedule and resend each appointment:

- 1** Click the appointment from the appointment list box.
- 2** Click Actions > Read > check the appointment time and change it if necessary.
- 3** Click Send. You will be prompted to retract the original appointment.
- 4** Click Retract to retract the original appointment.
- 5** Repeat steps 1-4 for every appointment you want to reschedule.

Note that the user interface of the GroupWise 4.1 Client for Macintosh is very similar to the interface for the GroupWise 5.x Client for Macintosh. If your users have the 5.x Macintosh client, they can use the instructions for appointment rescheduling that are provided here for the 4.1 Macintosh client.

## GroupWise 5.x 32-bit Client

The GroupWise 32-bit client for GroupWise 5.0, 5.1, and 5.2 stores all appointments in the user's mailbox. To retrieve the list:

- 1** On the toolbar, click  if your mailbox is not displaying outbound items (including appointments).
- 2** Click the appointment you want to reschedule.
- 3** Click Actions > Resend.

**4** Make changes to the appointment > click Send.

**5** Click Yes to retract the original appointment.

Note that it will probably not be necessary to reschedule appointments in the GroupWise 5.5 client because of DST problems.



# G

## Startup Switches

This section discusses the startup switches available for GroupWise® 4.x and for GroupWise 5.x.

<i>/cs-date</i>	<i>/as-date</i>	<i>/ncreateupdate</i>
<i>/ce-date</i>	<i>/ui-UserID</i>	<i>/ex-postofficename</i>
<i>/ae-date</i>	<i>/us</i>	<i>/ex-@path</i>

### ***/cs-date***

Modify appointments if created after *date*. If you do not use the */cs* switch, the ATA checks all appointments created before a date specified by the */ce* switch.

The ATA interprets dates on the command line in the *[yy]yy/mm/dd* format unless the */us* switch is also included in the command.

**Syntax:**

```
adjappt J:\develop -1  
/cs-98/08/03  
/ncreateupdate
```

### ***/ce-date***

Modify appointments if created before *date*. If you do not use the */ce* switch, the ATA checks all appointments created after the date specified by the */cs* switch.

The ATA interprets dates on the command line in the *[yy]yy/mm/dd* format unless the */us* switch is also included in the command.

**Syntax:**

```
adjappt J:\develop -1  
/ce-98/08/05  
/nocreateupdate
```

## ***/as-date***

The ATA interprets dates on the command line in the *[yy]yy/mm/dd* format unless the */us* switch is also included in the command.

Modify appointments if date range starts *date*. If you do not use the */as* switch, the ATA checks all appointments created before the date specified by the */ae* switch.

**Syntax:**

```
adjappt J:\develop -1  
/as-98/08/03 /ae-98/08/17  
/nocreateupdate
```

## ***/ae-date***

Modify appointments if date range ends *date*. If you do not use the */ae* switch, the ATA will check all appointments created after the date specified by the */as* switch.

The ATA interprets dates on the command line in the *[yy]yy/mm/dd* format unless the */us* switch is also included in the command.

**Syntax:**

```
adjappt J:\develop -1  
/as-98/08/03 /ae-98/08/17  
/nocreateupdate
```

## ***/ui-UserID***

Modify appointments if sender is *UserID*. The ATA modifies appointments sent only from this user. If this switch is not used, all other qualifying appointments will be modified.

**Syntax:**

```
adjappt J:\develop -1  
/cs-98/08/03  
/ui-RFernandez  
/nocreateupdate
```

## **/us**

Use the US date format. This switch signals the ATA to interpret dates on the command line using the *mm/dd/[yy]yy* format.

**Syntax:**

```
adjappt J:\develop -1  
/us/cs-08/03/98
```

## **/nocreateupdate (required)**

Do not update the creation time. The ATA modifies the creation date and time of every appointment specified unless this switch is used.

You should always use the /nocreateupdate switch to prevent the ATA from setting the appointment's creation date to the current date and time. This switch is not a default, and must be included on the command line.

**Syntax:**

```
adjappt J:\develop -1  
/cs-98/08/03  
/nocreateupdate
```

## **/ex-post\_office\_name**

Exclude this single post office from appointment modification. The ATA is restricted from modifying appointments sent by users in the designated post office to the indicated post office. Only one post office name should be specified.

**Syntax:**

```
adjappt J:\develop  
/ex-sales -1 /cs-98/08/03  
/nocreateupdate
```

## **/ex-@path**

Exclude the post offices listed in the Host Exclusion File located at *path*. The ATA is restricted from modifying appointments that are sent by users in the designated post office to the post offices (that is, the hosts listed in the designated text file. This switch is included to allow you to adjust

appointments based on the senders' post offices. It is a text file that lists post office names separated by commas, <CR><LF>, or simply <LF>.

**Syntax:**

```
adjappt J:\develop -1  
/cs-98/08/03  
/ex-@c:\hosts  
/nocreateupdate
```