General Manual for the following systems

Fast Track De-office Kontrol Pro Estimating System De-Office Project Management

Structured Query Language (SQL)

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Fast Track Estimating System Kontrol Pro Management System De-Office Management System

Overview

The above mention systems is now available in Structured Query Language(SQL) using Postgres database and also Omnis native data base system has been rewritten to have both systems generally incorporated into the same library file called **SQLFastTrackWeb##.lbs etc.**

If you have chosen Omnis native database, please see standard Fast Track Manual.

If you have chosen Postgres, please proceed to section **1.0**. below. PostgreSQL is available to download from the website.



1.0 PostgreSQL Setup

To set Fast Track using PostgreSQL database, you will need to follow the PostgresSQL Basic Installation Manual.(See doc. **PG.01**)

Technical Information

Please note that Postgres database is a stand-alone application and Omnis is another stand-alone application which communicates, stores and retrieves information from Postgres.

Please see this diagram below to explain how both systems work.



The following procedures must be done to keep your database secure and working efficiently. Please check your Control Panel –Administrative Tool-Services to make sure that the postgres service has been installed.



2.0 Setting up the Server Firewall

The next step is to set up the Firewall.

Some servers will require modifications to the firewall, in order for Postgres to go through the Firewall. This has to be done so that Postgres can communicate and not be treated as an unfriendly programme.

1. Go to Control Panel and choose



2. Choose "Advanced settings"



3. Choose "Inbound Rules"



4. Find "New Rule.." from the box on the very right

Act	Actions						
Inb	Inbound Rules						
i	New Rule						
7	Filter by Profile						
7	Filter by State						
7	Filter by Group						
	View						
Q	Refresh						
₿	Export List						
?	Help						

5. This window shall appear in your screen, choose "Port" and then " Next>"

Prev Inbound Rule Wizard									
Rule Type									
Select the type of firewall rule to create.									
Steps:									
a Rule Type	What type of rule would you like to create?								
Protocol and Ports									
 Action 	O Program								
 Profile 	Rule that controls connections for a program.								
Name	Port								
	Rule that controls connections for a TCP or UDP port.								
	O Predefined:								
	BranchCache - Content Retrieval (Uses HTTP)								
	Rule that controls connections for a Windows experience.								
	© Custom								
	Custom rule.								
	Learn more about rule types								
	< Back Next > Cancel								

6. Choose "Specific local ports: and put in the "SQL Port Number" that you put in your text file box (*refer to diagram2 on page 8*), in our case it is 5342 and then Next>

🔗 New Inbound Rule Wizan	d and the Second Property of Print	X						
Protocol and Ports								
Specify the protocols and ports	to which this rule applies.							
Steps:								
a Rule Type	Does this rule apply to TCP or U	DP?						
Protocol and Ports	TCP							
Action	O UDP							
Profile								
 Name 	Does this rule apply to all local po	orts or specific local ports?						
	All local ports							
	Specific local ports:	5432						
	Example: 80, 443, 5000-5010							
	Learn more about protocol and ports							
	< Back Next > Cancel							

7. Allow the connection and "Next>"

New Inbound Rule Wizard								
Action Specify the action to be taken when a connection matches the conditions specified in the rule.								
 What action should be taken when a connection matches the specified conditions? Allow the connection This includes connections that are protected with IPsec as well as those are not. Allow the connection if it is secure This includes only connections that have been authenticated by using IPsec. Connections will be secured using the settings in IPsec properties and rules in the Connection Security Rule node. Customize Block the connection Learn more about actions 								

8. All 3 boxes can be ticked. Please consult your IT professionals then "Next>"



9. Place a Name for example "Postgres 9.#" so it can be altered or deleted at a later stage, then "Finish".

Prev Inbound Rule Wizard	
Name Specify the name and description	of this rule.
Steps:	
Rule Type	
Protocol and Ports	
Action	
Profile	Name:
Name	Postgres
	Description (optional):
	< Back Finish Cancel

Important Notes

The next action that need to be done is repeating step 4 to 9 for the "Outbound Rules"



3.0 Text File

So that your Omnis library file can communicate with Postgres data file, some parameters have to be passed to the Postgres server. Information on how to find database and password will save time on not being prompted for a second time for password.

The location of the text file must be adjacent to the Omnis library file.

If you want Omnis Data file to start you are to place a path name similar to this diagram displayed below.

FastTrackSQLTable.txt -	FastTrackSQLTable.txt - Notepad							
File Edit Format View Help								
Omnis Datafile<#> Omnis Web Port No< Session Name <app> DAM Name<pgsqldam> Vendor<postgres> Host Name<192.168.2 User Name<postgres> Password<06021953ad SQL Data Base Name<</postgres></postgres></pgsqldam></app>	912> 0.7> > :fasttracksql>					~		
SQL Port Number<54:	52>					\sim		
	Ln 7, Col 20	100%	Windows (CRLF)	UTF-8				

Diagram2

De-office

/ deofficesql.txt - Notepad	
File Edit Format View Help	
Omnis Datafile<#>	
Omnis Web Port No<5912>	
Session Name <app></app>	
DAM Name <pgsqldam></pgsqldam>	
Vendor <postgres></postgres>	
Host Name<192.168.20.7>	
User Name <postgres></postgres>	
Password <>	
SQL Data Base Name<	>
SQL Port Number<5432>	

Diagram3

Kontrol Pro

```
kontrolprosqltable.txt - Notepad
File Edit Format View Help
Omnis Datafile<#>
Omnis Web Port No<5912>
Session Name<App>
DAM Name<PGSQLDAM>
Vendor<Postgres>
Host Name<159.196.2.37>
User Name<postgres>
Password< >
SQL Data Base Name<projectsql100>
SQL Port Number<5432>
```

Diagram 4

This is where you change details. Please remember to save

If you do not want Omnis to accessed PostgreSQL, you are to place "#" instead of the data file pathname for Omnis Native data file.

The first line would be : Omnis Data file :- <#>.

The text structure must be maintained using ten (10) lines. They are read into Omnis application using the parameter stored in between $\langle \rangle$ angle values.

Similar line feeds must be maintained in other words you must have 10 lines as per the above diagram.

Please find example of IP Address below (re : Host name)

<127.0.0.1> or <LOCALHOST> and is on the local computer.

<192.168.1.4> = Location on the Local Area Network (LAN)

<110.143.43.164> = Location over the Web.

4.0 HBA (Host-Based Authentication)

The following window is launched from the Postgres folder using **pgAdmin4.exe**. It is located in C\Program Files\PostgreSQL\#.#\bin.

😋 🔵 🗢 📙 🕨 Computer 🕨 Local Disk (C:) 🕨 Program Files 🕨 Post	greSQL 🕨 🕨 bin			_		
Organize 🕶 🗔 Open Burn New folder						
	Namo	Data modified	Turne	Cize		
▲ ☆ Favorites	Name	Date modified	туре	SIZE		
🧮 Desktop	🚳 libpq.dll	16-12-14 4:13 PM	Application extens	138 KB		
😺 Downloads	S libxml2.dll	6-5-14 5:03 PM	Application extens	1,678 KB		
🖳 Recent Places	libxslt.dll	1-5-14 9:41 PM	Application extens	296 KB		
	oid2name.exe	16-12-14 4:15 PM	Application	25 KB		
4 📜 Libraries	pg_archivecleanup.exe	16-12-14 4:15 PM	Application	24 KB		
Documents	🖤 pg_basebackup.exe	16-12-14 4:13 PM	Application	87 KB		
🖻 🌙 Music	🖤 pg_config.exe	16-12-14 4:13 PM	Application	57 KB		
Pictures	🖤 pg_controldata.exe	16-12-14 4:13 PM	Application	57 KB		
Videos	🖤 pg_ctl.exe	16-12-14 4:13 PM	Application	76 KB		
	🖤 pg_dump.exe	16-12-14 4:13 PM	Application	309 KB		
4 🜉 Computer	🖤 pg_dumpall.exe	16-12-14 4:14 PM	Application	95 KB		
🛛 🚢 Local Disk (C:)	pg_isolation_regress.exe	16-12-14 4:18 PM	Application	54 KB		
Removable Disk (E:)	pg_isready.exe	16-12-14 4:14 PM	Application	35 KB		
My Web Sites on MSN	🖤 pg_receivexlog.exe	16-12-14 4:13 PM	Application	70 KB		
	🖤 pg_recvlogical.exe	16-12-14 4:13 PM	Application	74 KB		
🖌 📬 Network	pg_regress.exe	16-12-14 4:18 PM	Application	54 KB		
ENTOS1	pg_regress_ecpg.exe	16-12-14 4:18 PM	Application	55 KB		
▷ 🖳 REDHAT5	🖤 pg_resetxlog.exe	16-12-14 4:13 PM	Application	64 KB		
▷ 1 WS05-PC	🖤 pg_restore.exe	16-12-14 4:14 PM	Application	145 KB		
⊳ r■ WS09	pg_standby.exe	16-12-14 4:15 PM	Application	28 KB		
⊳ r ≡ WS10	<pre>pg_test_fsync.exe</pre>	16-12-14 4:16 PM	Application	27 KB		
1.6	<pre>pg_test_timing.exe</pre>	16-12-14 4:16 PM	Application	21 KB		
	pg_upgrade.exe	16-12-14 4:16 PM	Application	100 KB		
	<pre>pg_xlogdump.exe</pre>	16-12-14 4:16 PM	Application	46 KB		
	I pgAdmin4.exe	16-12-14 4:23 PM	Application	8,547 KB		
	pgbench.exe	16-12-14 4:15 PM	Application	59 KB		
		16-12-14 4-12 DM	Application	4.460 KB	Ξ	

Open this one and this window below should appear Pgadmin 4 will be in further steps.



The pg_hba.conf file is usual located in Windows Mac and Linux in the following locations.

Linux located :- /etc/postgres/##/main/pg_hba.conf

Mac Located TBA

- □						
File Home Share View					^	?
Image: Pin to Quick access Copy Paste Image: Copy path Paste shortcut	Move Cop to to	y Delete Rename	New item •	Properties	Select all Select none Invert selection	
Clipboard	(Drganise	New	Open	Select	
← → × ↑ 📙 « 14 > data	~ 0	Search data			۶	D
🔥 uninstall	^	Name	^	Date modified	Туре	^
🔄 xcomp		base		4/10/2022 11:10 AM	File folder	
📙 xtransport		global		23/02/2024 7:53 AN	File folder	
OS613SVR		log		23/02/2024 7:53 AN	File folder	
PCHealthCheck		pg_commit_t	s	11/08/2022 8:41 AN	File folder	
pgagent		pg_dynshme	m	11/08/2022 8:41 AN	File folder	
PostgreSQL		pg_logical		23/02/2024 7:58 AN	I File folder	
14		pg_multixact		11/08/2022 8:41 AN	File folder	
bin		pg_notify		11/08/2022 8:41 AN	File folder	
deta		pg_repisiot		11/08/2022 8:41 AN	I File folder	
		pg_serial		11/08/2022 8:41 AN	File folder	
base		pg_snapshot	S	11/08/2022 8:41 AN	File folder	
global		pg_stat		23/02/2024 7:53 AN	File folder	
log		pg_stat_tmp		23/02/2024 8:56 AIV	File folder	
pg_commit_ts		pg_subtrans		2/09/2023 4:02 PIVI	File folder	
pg_dynshmem		pg_tbispc		11/00/2022 0:41 AIV	File folder	
📙 pg_logical		pg_wopnase	-	2/09/2023 4:37 PM	File folder	
pg_multixact		pg_war		11/08/2022 8:41 AN	File folder	
pg_notify		current loafil	les	23/02/2024 7:53 AN	File	
pg repisiot		pg hba .conf	.bk	27/08/2022 8:05 AN	BK File	
pg serial		pg_hba.conf		1/09/2023 3:34 PM	CONF File	
pg_snapshots	~	<				>
27 items 1 item selected 4.76 KB					ii = =	

Go to tab File, choose "pg.hba.conf"

The HBA file that contains all the information is in a text format, we have only shown the bottom portion of the text for clarity. Read the top of the text file for further clarification.

# TYPE	DATABASE	USER	ADDRESS	METHOD						
# "loca	# "local" is for Unix domain socket connections only									
local	all	all		scram-sha-256						
host	postgres	pgagent	127.0.01/32	trust						
# IPv4 :	local connection	s:								
# host	all	all	127.0.0.1/32	scram-sha-256						
# IPv6 3	local connection	s:								
host	all	all	::1/128	scram-sha-256						
# Allow	replication con	nections from lo	calhost, by a user with	the						
# repli	cation privilege									
local	replication	all		scram-sha-256						
host	replication	all	127.0.0.1/32	scram-sha-256						
host	replication	all	::1/128	scram-sha-256						
host	all	all	192.168.20.4/32	md5						
host	all	all	192.168.20.5/32	md5						
host	all	all	127.0.0.1/32	md5						

The settings can be made via a text editor and must be saved when complete.

After the HBA file has been altered and saved the current instance of Postgres must be reset.

This can be done in Windows via "Systems" list window or as below.

postgresql-x64-14 - PostgreSQL Server 14 Properties (Local $ imes$
General Log On Recovery Dependencies
Service name: postgresql-x64-14
Display name: postgresql-x64-14 - PostgreSQL Server 14
Description: Provides relational database storage.
Path to executable: "C:\Program Files\PostgreSQL\14\bin\pg_ctl.exe" runservice -N "postgresc
Startup type: Automatic ~
Service status: Running
Start Stop Pause Resume
You can specify the start parameters that apply when you start the service from here.
Start parameters:

Assuming you have PGAdmin 4 active, Drop down menu "Object" has "Refresh" line do so, this restarts the data base if this not correct you be informed the last entries are not correct.

Also see Pgadmin4 drop down menu called tools for :- "Reload Configuration"

Remote users are sometimes required to provide their IP address for the HBA file entry.

If you are viewing from a remote computer system, use the internet to and type in "What's my ip address" you should get a quick response.

FAST TRACK TYPICAL INSTALLATION WITH POSTGRESQL DATABASE



Creating New User and New Database in Postgres

Appendix 1. Creating New User in Postgres

Go to pgAdmin4.exe (C:\Program Files\PostgreSQL\##\bin)

Double click on PostgreSQL #.# (localhost:5432)



 $\label{eq:linear} Wanual_SQLFastTrack \\ 001-10_ManualPostgreSQL.doc \\ \label{eq:linear}$

🤤 Create	e - Database						×
General	Definition	Security	Parameters	Advanced	SQL		
Database	e	0					
Owner		🐣 p	ostgres				· · ·
Commen	t						
							ĥ
() 'Datab	ase' cannot l	be empty.					×
•					×	Close 🕤 Reset	🖥 Save

With Fast Track Estimating System it is usually called :- "fasttracksql"

Appendix3Restore data for the new database

In the tab Tool choose "Restore"

S pgAdmin 4						
File Object	Tools Help					
Object Explo	ERD Tool					
✓ 🗟 windo	Grant Wizard					
> 📑 Ind	PSQL Tool					
> 📑 Pos	Query Tool					
> 📑 ubu	Schema Diff					
~ 🦅 ubi - ~ 🚍 [Restore					
~ 🗧	Backup Globals					
>	Backup Server					
~	Backup					
Ś	Import/Export Data					
>	Import/Export Servers					
>	Maintenance					
>	Search Objects					
>	Add Named Restore Point					
> 5	Pause Replay of WAL					
> 5	Resume Replay of WAL					
> 5	Reload Configuration					

Select a data base in the Pgadmin tree, and then a file to restore and similar information. Consult web site on postgres for more information.

Choose the format, browse the file name by click on the, fill in Number of Jobs and choose the Rolename.

Restore (Database: atadmedicalsql002)						
General Data Options Que	ery Options Table Options Options					
Format	Custom or tar	~				
Filename	\\UBUNTU02\general_office\BackupSQL\deofficesql112\deofficesql112_2023-07-11.sql	5				
Number of jobs	1					
Role name	🔺 postgres	~				
00	× Close → Reset • Rest	ore				

Look into "Data Options" tab for more specific restores.

Restore (Restore (Database: atadmedicalsql002)								
General	Data Options	Query Options	Table Options	Options					
Sections	S								
Pre-data	а			Data					
Post-da	ita								
Type of	objects								
Only da	ta			Only schema					
Do not s	ave								
Owner				Privileges					
Tablesp	aces			Comments					
Publica	tions			Subscriptions					
Security	y labels								
0 6					X Close → Reset Res	store			

This document is only a basic summary of the setting up of Postgres, the subjects are covered in more details on the WEB.

Notes:-

Most Atad Data applications have automatic set up of the SQL tables required, and will engage when software first runs.

Also if extra tables are added it will automatically add these new tables.

1.0 Please note some references are made to older versions of Postgres.