# WHITE.NET Diagram

# Prerequisite

* The scripts used for refreshing the test publication databases or for production release are in teamsite.
* There are test and production environment for WHITE.NET. Every environment includes six publication databases for PHSA, BCEHS, BCCSS, VCH, PHC and FHA. The configuration of publication, distribution and subscription of every replication is in the excel file of Publication\_Distribution\_Subscription\_Configuration.
* The following URL includes the script and configuration file  
  <http://our.healthbc.org/sites/TSC/Infrastruct/DBServ/TeamPrivate/Forms/AllItems.aspx?RootFolder=%2Fsites%2FTSC%2FInfrastruct%2FDBServ%2FTeamPrivate%2FSQL%2FProject%2FWHITE%2ENET%2FDocument%20and%20Script%20for%20New%20Release&FolderCTID=0x012000D9152AF2063A1D469B967718E6C1B312&View=%7B90278D88%2D1729%2D4949%2DBA8A%2D4D41B8E09308%7D>
* WHITE.Net for VIHA, IHA and NHA are managed by the corresponding health authority.

# Procedures for Refreshing Test Replication Database

This section is for refreshing the six test environments. All the scripts must be **run on the publication server.** And the settings of publication, distribution and subscription must **be changed according to the specific test environment**. The settings can be found in the excel file of Publication\_distribution\_Subscription\_configuration.

1. Stop WHITE application in IIS – PHSA ( 1 min)
2. Stop WHITE Windows service – PHSA ( 1 min)
3. In replication Monitor, stop subscription agent and the log-reader agent - BCCSS DBA per HA ( 5 minutes)
4. Execute “1\_drop\_subscription.sql” script on publication server to drop the subscription to the publication – BCCSS DBA (15 minutes)
5. Execute “2\_drop\_articles.sql” script on publication server to remove all the published articles for the publication – BCCSS DBA (20 minutes)
6. Execute “3\_drop\_publication.sql” script to drop the publication -- BCCSS DBA (5 minutes)
7. Execute “4\_set\_database\_replication\_to\_false” to disable the replication feature for the database. – BCCSS DBA
8. Backup production WHITE Database and restore it on test server -- BCCSS DBA (2 hour or more, which depends on the size of the source database and the network traffic).
9. Notify WHITE team the database restore is complete – BCCSS DBA
10. Back up WHITE application folder – PHSA ( 1 min)
11. Apply WHITE service pack – PHSA ( 1 min)
12. Start WHITE Windows service – PHSA ( 1 min)
13. Start WHITE application in IIS – PHSA ( 1 min)
14. Notify IHA the completion of service pack installation – PHSA ( 1 min)
15. Execute “5\_set\_database\_replication\_to\_true.sql” to start the replication – BCCSS DBA
16. Execute “6\_create\_publicaton.sql” to re-create the publication – BCCSS DBA (10 minutes)
17. Execute “publisher\_09\_add\_articles.sql” to add the articles into the publication – BCCSS DBA (10 minutes)
18. Execute “publisher\_11\_add\_subscription.sql” to add the subscription to the publication – BCCSS DBA (5 minutes)
19. Start snapshot agent in replication monitor to re-create the snapshot of the new publication – BCCSS DBA (15 minutes)
20. Start log-reader agent from replication monitor – BCCSS DBA
21. Start distribution agent from replication monitor – BCCSS DBA (5 minutes)
22. Notify WHITE team the release is done.

# Procedures for Production Release

This section is for new release to the six production environments. All the scripts must be **run on the publication server.** And the settings of publication, distribution and subscription must **be changed according to the specific production environment**. The settings can be found in the excel file of Publication\_distribution\_Subscription\_configuration.

1. Stop WHITE application in IIS – PHSA ( 1 min)
2. Stop WHITE Windows service – PHSA ( 1 min)
3. In replication Monitor, stop subscription agent and the log-reader agent - BCCSS DBA per HA ( 5 minutes)
4. Execute “1\_drop\_subscription.sql” script on publication server to drop the subscription to the publication – BCCSS DBA (15 minutes)
5. Execute “2\_drop\_articles.sql” script on publication server to remove all the published articles for the publication – BCCSS DBA (20 minutes)
6. Backup production WHITE Database -- BCCSS DBA (30 minutes)
7. Notify WHITE team the database restore is complete – BCCSS DBA
8. Back up WHITE application folder – PHSA ( 1 min)
9. Apply WHITE service pack – PHSA ( 1 min)
10. Start WHITE Windows service – PHSA ( 1 min)
11. Start WHITE application in IIS – PHSA ( 1 min)
12. Notify IHA the completion of service pack installation – PHSA ( 1 min)
13. Execute “publisher\_09\_add\_articles.sql” to add the articles into the publication – BCCSS DBA (10 minutes)
14. Execute “publisher\_11\_add\_subscription.sql” to add the subscription to the publication – BCCSS DBA (5 minutes)
15. Start snapshot agent in replication monitor to re-create the snapshot of the new publication – BCCSS DBA (15 minutes)
16. Start log-reader agent from replication monitor – BCCSS DBA
17. Start distribution agent from replication monitor – BCCSS DBA (5 minutes)
18. Notify WHITE team the release is done.

# Improvement

To simplify the WHITE.NET replication, all of the production publication databases will be moved onto SPDBSWHT003 and all of the test publication databases onto SDDBSWHT003. The subscriptions will be on server SPDBWHTSUB.

Accordingly, all the 18 service accounts for six different Health Authorities will be reduced to three accounts for snapshot agent, log-reader agent and subscription agent.