Overview

This document provides a summary of the procedural and technical steps required for **Counties** to access the **SACWIS Ad-Hoc** and **Near Real-Time Replicated Databases** and the **Production Database**.

Note: This document may contain information duplicated in other documents, such as "SACWIS metro tech guide.doc".

Networking

For **Networking and Firewall Configuration**, each county / agency falls into one of two situations:

- 1. **The county is already on the state network.** They will access the database servers using the same IP address as State support staff. Firewall configuration is required to allow their computers to access ODJFS database servers.
- 2. The county is not already on the state network. They will be assigned a NAT IP address or possibly use a virtual IP address (VIP), and OIT and JFS network administrative staff will configure firewall/router translation, as needed, to resolve their NAT addresses to the actual server IP addresses. Firewall configuration is required to allow their computers to access ODJFS database servers, and to perform the address translation.

Database Instances, Hosts, and Ports

Two database instances are available for SACWIS Ad-Hoc reporting: one **Near Real Time** database for ancillary applications, and the **Production** online transactional database. All of the SACWIS databases are at the Oracle 11g R2 version. All database instances are hosted on a server at OIT:

- Ad-Hoc 10.14.195.132 (ax-svc-02501),
- Ad-Hoc2 10.14.195.129 (ax-svc-02498),
- Near Real Time replacement / Business Continuity, and
- Production.

Note: The full context host name includes: .odjfs.state.oh.us



It should be remembered that transactions on the **Production** and **Near Real Time** replacement environments may experience **mismatches** between **Parent** and **Child** record relationships depending upon whether individual records are undergoing creation, update and/or deletion when they are accessed. The swap between the SACWIS Production and Near Real Time replacement / Business Continuity databases is controlled internally by the "sac-rpt" setting and that setting is currently pointing at the SACWIS **Production** database.

Traffic between the County computers and ODJFS Oracle database is established via **Port 1521**, which <u>must be open</u> through the firewall. This port is used regardless of the client software used by the county (Business Objects Crystal Reports, Oracle SQL Developer and other Oracle utilities, ODBC/MS Access/Excel, Quest Software TOAD, Java Applications, etc.).

Instance	Contents	Domain (State Network Only)		PORT	Service Name
SACWIS Production	Production Data. Real-Time	10.254.125.212 10.254.125.222 10.254.125.232	sac-rpt	1521	SACRPT
SACWIS Real- Time / Business Continuity	Production Data. Real-Time within Seconds	10.14.195.136 10.14.195.137 10.14.195.138	sac-rpt	1521	SACRPT
SACWIS ADHOC	Production Data. Refreshed nightly at 8PM	10.14.195.132	ax-svc-02501	1521	ADHOC_SACRPT
SACWIS ADHOC2	Production Data. Refreshed nightly at Midnight	10.14.195.129	ax-svc-02498	1521	ADHOC_SACRPT



State Network TNSNAMES.ORA Entries

The following entries assume a **County** on the **State network**.

For Near Real Time Database connections, use the following:

```
SACRPT=
(DESCRIPTION=
  (LOAD_BALANCE=yes)
  (ADDRESS=
   (PROTOCOL=TCP)
   (HOST=sac-rpt)
   (PORT=1521)
  )
  (CONNECT_DATA=
   (FAILOVER_MODE=
    (TYPE=select)
    (METHOD=basic)
    (RETRIES=10)
    (DELAY=5)
   )
   (SERVICE_NAME=SACRPT)
  )
 )
0
```



For Adhoc Database Connections, use the following:

```
ADHOC_SACRPT=
(DESCRIPTION=
(ADDRESS=
(PROTOCOL=TCP)
(HOST=ax-svc-02501)
(PORT=1521)
)
(CONNECT_DATA=
(SERVER=dedicated)
(SERVICE_NAME=ADHOC_SACRPT)
)
```

For Ad-hoc2 Database Connections, use the following.

Note: The only difference is the alias name and the – hostname. The service_name is the same on purpose.

```
ADHOC2_SACRPT=
(DESCRIPTION=
(ADDRESS=
(PROTOCOL=TCP)
(HOST=ax-svc-02498)
(PORT=1521)
)
(CONNECT_DATA=
(SERVER=dedicated)
(SERVICE_NAME=ADHOC_SACRPT)
)
```



Database Accounts and User IDs

Two types of database accounts are provided for counties, as needed:

- USER accounts are created after a JFS Form 7078 is received requesting access to the "SACWIS Replicated Environments". Anthony Guzman receives these from the counties and forwards to INFOSEC, the SACWIS_Help_Desk and the Oracle DBA team. The DBA Team creates the accounts in both the Near Real Time replacement / Business Continuity and Production and Ad-Hoc environments, using a script which assigns the required permissions and creates necessary database objects (synonyms, logon triggers, etc.).
- SYSTEM accounts are provided on an as-needed basis to counties with an IT staff, and requiring integration between their systems and the State's. These requests are sent to the SACWIS_Help_Desk who then forward to the DBA Staff. The DBA Team creates the accounts in Adhoc and Real-Time databases using a script which assigns the required permissions and creates necessary database objects (synonyms, logon triggers, etc.).

Two types of **SYSTEM-to-SYSTEM** accounts are provided, as needed:

- **EXPORT** user accounts, ending in *_EXP, are provided to export a copy of SACWIS data, limited where possible to that agency's subset of SACWIS data.
- **APPLICATION** user accounts, ending in *_APPSRVR, are provided to allow applications developed and maintained by the county to access the Near Real Time replacement / Business Continuity and Production and Ad-Hoc databases. This account is not limited to the agency's subset of SACWIS data, by default. Instructions are provided to counties with this account on how to add code to their applications to allow this connection to only access the agency's subset of SACWIS data, where possible.

If you need additional information or assistance, please contact the SACWIS Help Desk.

