



[qry\_List\_Active\_Sims]  
Flowchart ID: Blue-1  
Create a list of the Active Simulations listed in the database as currently running

Tables

[tbl\_active\_sim]  
Contains master records of scenarios created by Controller

[SimID]

[tbl\_sim]  
Contains records of simulations in database

```
SELECT
'tbl_active_sim'.Active_SimID',
'tbl_active_sim'.Active_Sim_Name',
'tbl_sim'.SimID',
'tbl_sim'.Sim_Name',
'tbl_sim'.Sim_Description',
'tbl_sim'.Sim_VisualPath'
FROM 'tbl_active_sim'
INNER JOIN 'tbl_sim' ON
('tbl_sim'.SimID' =
'tbl_active_sim'.SimID')
```

Critical Fields

[Active\_SimID]= a persistent variable the Player panel needs throughout the scenario to connect to the correct "real-time" scenario.

[Sim\_VisualPath]=a persistent variable the Player panel needs throughout the scenario to append the correct file path to the visual filename the Player panel is loading.



[qry\_List\_Available\_Units]  
Flowchart ID: Blue-4  
Create a list of Units available for a Player to use in a Player-selected Active Simulation (scenario) currently running

Tables

[tbl\_active\_sim]  
Contains master records of scenarios created by Controller

[Active\_SimID]

[SimID]

[tbl\_response\_profile]  
Contains records of pre-assigned response profiles (e.g. residential, commercial, etc.)

[Response\_ProfileID]

[tbl\_response\_time]  
Response time in minutes for individual units included in a response profile

[UnitID]

[tbl\_active\_players]  
Contains master records of Players currently participating in scenarios [Active\_SimID], their unit [UnitID], and their current location in the scenario [LocationID]

[UnitID]

[tbl\_unit]  
List of Units in database

```
SELECT
'tbl_active_sim'.Active_SimID',
'tbl_active_sim'.Active_Sim_Name',
'tbl_active_sim'.SimID',
'tbl_response_profile'.Response_ProfileID',
'tbl_response_profile'.Response_Profile_Name',
'tbl_response_time'.Response_Time',
'tbl_unit'.UnitID',
'tbl_unit'.Unit_Name',
'tbl_unit'.Unit_Callsign'
FROM
'tbl_active_sim'
Inner Join 'tbl_response_profile' ON 'tbl_active_sim'.Response_ProfileID' =
'tbl_response_profile'.Response_ProfileID'
Inner Join 'tbl_response_time' ON 'tbl_response_profile'.Response_ProfileID' =
'tbl_response_time'.Response_ProfileID'
Inner Join 'tbl_unit' ON 'tbl_response_time'.UnitID' = 'tbl_unit'.UnitID'
WHERE 'tbl_unit'.UnitID NOT IN (SELECT 'tbl_active_players'.UnitID FROM
'tbl_active_players' WHERE 'tbl_active_players'.Active_SimID' =
'tbl_active_sim'.Active_SimID')
```

Critical Fields

[UnitID]=a persistent variable the Player panel needs throughout the scenario to identify their Unit. The [UnitID] essentially serves as the 'login name' of a Player. [Response\_TimeID] and [Response\_Time]=the key and response time in minutes (respectively) for a given unit in a scenario.



[tbl\_active\_players]  
Flowchart ID: Red 'a'  
Create an Active Player record for a player joining a scenario

Tables

[tbl\_active\_players]  
Contains master records of players joined to a given Active Sim (scenario)

INSERT

```
'tbl_active_players'.Active_PlayersID',
'tbl_active_sim'.Active_SimID',
'tbl_active_players'.UnitID',
'tbl_active_players'.LocationID'
```

Use default starting [LocationID]  
"Waiting for Dispatch"



[tbl\_active\_players]  
Flowchart ID: Red 'b'  
Update Active Player record for Player's new location

Tables

[tbl\_active\_players]  
Contains master records of players joined to a given Active Sim (scenario)

FOR

```
'tbl_active_players'.Active_PlayersID'
UPDATE
'tbl_active_players'.LocationID'
```

USING [LocationID]  
from selected Movement button



[qry\_Player\_Status]  
Flowchart ID: Blue-5 | Rev: 11-08-2006 8:00 p.m.  
This is a complex query performing several functions but serving one purpose, namely to provide the current status of a Player to the Player Panel (e.g. Location, Situation Level, and Message(s)).

Tables

[tbl\_active\_sim]  
Contains master records of scenarios created by Controller

[tbl\_active\_players]  
Contains master records of Players currently participating in scenarios [Active\_SimID], their unit [UnitID], and their current location in the scenario [LocationID]

Union

[tbl\_message\_location]  
Message(s) assigned to Locations and visible to anyone at that location

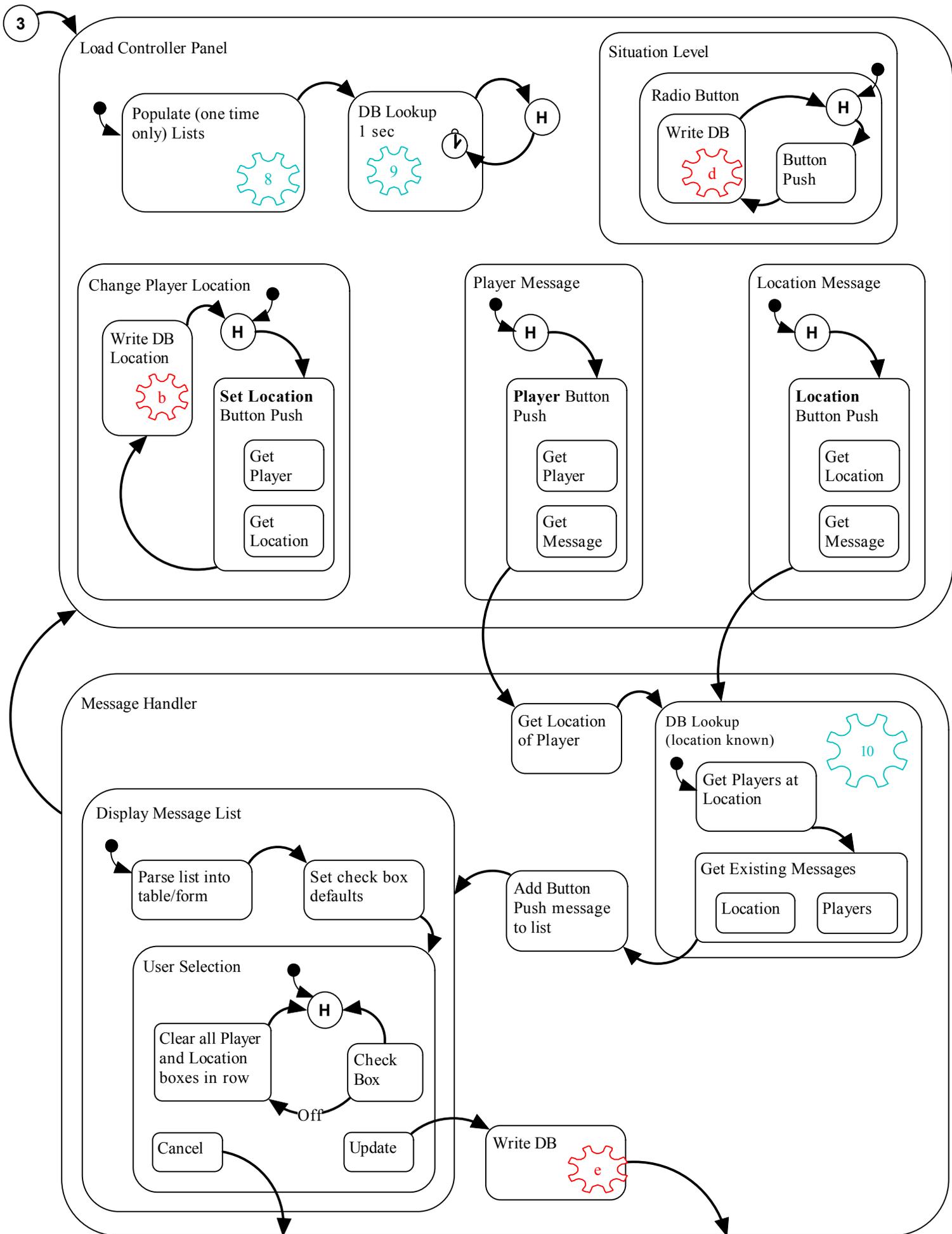
[tbl\_message\_players]  
Message(s) assigned to Active Players and visible only to that Player

SELECT

```
'tbl_active_sim'.Active_SimID',
'tbl_active_players'.Active_PlayersID',
'tbl_active_sim'.SimID',
'tbl_active_players'.LocationID',
'tbl_active_sim'.SituLevelID',
'tbl_message_players'.MessageID'
FROM
'tbl_active_players'
Inner Join 'tbl_active_sim' ON 'tbl_active_sim'.Active_SimID' =
'tbl_active_players'.Active_SimID'
Left Outer Join 'tbl_message_players' ON 'tbl_message_players'.Active_PlayersID' =
'tbl_active_players'.Active_PlayersID'
UNION
SELECT
'tbl_message_location'.ActiveSimID',
'tbl_active_players'.Active_PlayersID',
'tbl_active_sim'.SimID',
'tbl_message_location'.LocationID',
'tbl_active_sim'.SituLevelID',
'tbl_message_location'.MessageID'
FROM
'tbl_message_location'
Left Outer Join 'tbl_active_players' ON 'tbl_message_location'.LocationID' =
'tbl_active_players'.LocationID' AND 'tbl_message_location'.ActiveSimID' =
'tbl_active_players'.Active_SimID'
Inner Join 'tbl_active_sim' ON 'tbl_active_sim'.Active_SimID' =
'tbl_message_location'.ActiveSimID'
```

Fields:

[Active\_SimID], [Active\_PlayersID], [SimID], [LocationID], [SituLevelID], [MessageID]





[tbl\_active\_sim]  
Flowchart ID: Red 'c' | Rev 11-28-2006 12:25 pm  
Create active simulation record for new exercise being created by Controller

**Tables**

[tbl\_active\_sim]  
Contains master records of Active Simulations (scenarios)

**INSERT**  
 `tbl\_active\_sim`.`Active\_SimID`  
 `tbl\_active\_sim`.`Active\_Sim\_Name`  
 `tbl\_active\_sim`.`SimID`  
 `tbl\_active\_sim`.`SituLevelID`  
 `tbl\_active\_sim`.`Active\_Sim\_Start`  
 `tbl\_active\_sim`.`Active\_Sim\_Last\_Update`  
 `tbl\_active\_sim`.`Response\_ProfileID`

**USING**  
 [Active\_Sim\_Name] from 'Scenario Name' text box  
 [SimID] from 'Select Sim' button  
 [SituLevelID] from Blue-7  
 [Active\_Sim\_Start] set to current server time  
 [Active\_Sim\_Last\_Update] set to current server time  
 [Response\_ProfileID] from 'Select Profile' button



[tbl\_active\_sim]  
Flowchart ID: Red 'd' |  
Rev 11-11-2006 4:15 pm  
Update Active Sim record for scenario's new Situation Level

**Tables**

[tbl\_active\_sim]  
Contains master records of Active Simulations (scenarios)

**FOR `tbl\_active\_sim`.`Active\_SimID`  
UPDATE  
`tbl\_active\_sim`.`SituLevelID`**

**USING [SituLevelID]  
from selected Situation Level radio button**



[tbl\_active\_sim]  
Flowchart ID: Red 'e' | Rev 11-13-2006 2:15 pm  
Modify message record(s)

**Modify message PLAYER**  
Flowchart ID: Red 'e.1' | Rev 11-13-2006 2:15 pm

**Tables**

[tbl\_message\_players]  
Contains records of active Player Messages

**FOR `tbl\_message\_players`.`Message\_PlayersID`**

INSERT    UPDATE    DELETE

**Modify message LOCATION**  
Flowchart ID: Red 'e.2' | Rev 11-13-2006 2:15 pm

**Tables**

[tbl\_message\_location]  
Contains records of active Location Messages

**FOR `tbl\_message\_location`.`Message\_LocationID`**

INSERT    UPDATE    DELETE

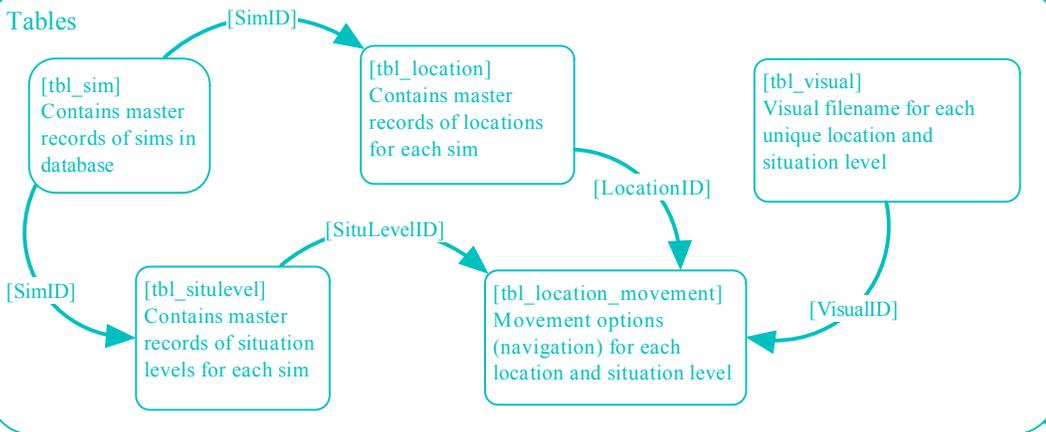


### [qry\_Location\_Movement\_Info]

Flowchart ID: Blue-6 | Rev: 11-08-2006 8:30 p.m.

Description: List for each simulation the locations, their given situation levels, the visual filename that goes with the specific location, and the [LocationID] for each movement option from this location for each situation level. NOTE the movement fields (e.g. Left, Right, etc.) contain the [LocationID] for where that movement would take a player. In other words, the [Left] field contains the [LocationID] for where the Player will move if the Player were to select Left. Also NOTE a movement option for a location is dependent on BOTH the current location and the current situation level (movement options for a given location can be different for situation level 3 versus situation level 2).

#### Tables



#### SELECT

```

SELECT
'tbl_sim'.SimID,
'tbl_sim'.Sim_Name,
'tbl_location'.LocationID,
'tbl_location'.Location_ShortName,
'tbl_location'.Location_LongName,
'tbl_situlevel'.SituLevelID,
'tbl_situlevel'.SituLevel_short,
'tbl_location_movement'.Location_MovementID,
'tbl_visual'.VisualID,
'tbl_visual'.Visual_filename,
'tbl_location_movement'.Left,
'tbl_location_movement'.Right,
'tbl_location_movement'.Forward,
'tbl_location_movement'.Backward,
'tbl_location_movement'.Up,
'tbl_location_movement'.Down,
'tbl_location_movement'.Dir7,
'tbl_location_movement'.Dir8,
'tbl_location_movement'.Dir9,
'tbl_location_movement'.Dir10
FROM
'tbl_sim'
Inner Join 'tbl_location' ON 'tbl_sim'.SimID = 'tbl_location'.SimID
Inner Join 'tbl_location_movement' ON 'tbl_location'.LocationID = 'tbl_location_movement'.LocationID
Inner Join 'tbl_situlevel' ON 'tbl_sim'.SimID = 'tbl_situlevel'.SimID AND 'tbl_situlevel'.SituLevelID =
'tbl_location_movement'.SituLevelID
Inner Join 'tbl_visual' ON 'tbl_location_movement'.VisualID = 'tbl_visual'.VisualID
ORDER BY
'tbl_location'.Location_Sort_Order ASC,
'tbl_situlevel'.SituLevel_short ASC
  
```

#### Fields:

- [SimID]
- [Sim\_Name]
- [LocationID]
- [Location\_ShortName]
- [Location\_LongName]
- [SituLevelID]
- [SituLevel\_short]
- [Location\_MovementID]
- [VisualID]
- [Visual\_filename]
- [Left]
- [Right]
- [Forward]
- [Backward]
- [Up]
- [Down]
- [Dir7]
- [Dir8]
- [Dir9]
- [Dir10]



qry\_SituLevel\_firstrecord  
 Flowchart ID: Blue-7 | Rev 11-10-2006 3:45 pm  
 The purpose of this query is to get the starting or default [SituLevelID] for a given simulation that is being created by a Controller.

Tables

[tbl\_situlevel]  
 Contains master records of Situation Levels for a simulation

```
SELECT
`tbl_situlevel`.`SituLevelID`,
`tbl_situlevel`.`SimID`
FROM
`tbl_situlevel`
ORDER BY
`tbl_situlevel`.`SituLevel_sortorder`
ASC
LIMIT 1
```

WHERE [SimID]={the new SimID}

This query requires a WHERE clause on the [SimID] and then returns only the first record (ordered by SituLevel\_sortorder). Simulation designers will use the sort order value to indicate the lowest or starting Situation Level they intend to be used for the a new scenario (usually Situation Level "0" or "No Fire"). It is necessary to retrieve the starting [SituLevelID] in preparation for writing a new Active Sim record.



qry\_List\_Simulations  
 Flowchart ID: Blue-2 |  
 Rev 11-10-2006 4:00 pm  
 List all simulations in database available to be run

Tables

[tbl\_sim]  
 Contains master records of Situation Levels for a simulation

```
SELECT
`tbl_sim`.`SimID`,
`tbl_sim`.`Sim_Name`,
`tbl_sim`.`Sim_Description`,
`tbl_sim`.`Sim_VisualPath`
FROM
`tbl_sim`
```



qry\_Response\_Profile  
 Flowchart ID: Blue-3 | Rev 11-10-2006 4:30 pm  
 This query retrieves a list of all response profiles listed in [tbl\_response\_profiles] for the Controller to select which type of unit response is to be used for the scenario being created. The [Response\_ProfileID] field is needed to WRITE the record creating a new scenario.

Tables

[tbl\_response\_profile]  
 Contains master records of Response Profiles for all simulations

```
SELECT
`tbl_response_profile`.`Response_ProfileID`,
`tbl_response_profile`.`Response_Profile_Name`,
`tbl_response_profile`.`Response_Profile_Desc`
FROM
`tbl_response_profile`
```

The purpose of these queries is to update the Controller Panel to the current status of the Situation Level (Blue 9.1), Player List (Blue 9 and may be run in series or parallel for speed.

qry\_SituLevel

Flowchart ID: Blue-9.1 |  
Rev 11-11-2006 4:35 pm

This query is used to return the Situation Level for Active Simulations (scenarios). Use a WHERE clause to return only the record for the Active Simulation being queried (e.g. WHERE `tbl\_active\_sim`.`Active\_SimID` = current scenario)

Tables

[tbl\_active\_sim]  
Contains master records of all Active Simulations

```
SELECT
`tbl_active_sim`.`Active_SimID`,
`tbl_active_sim`.`SituLevelID`
FROM
`tbl_active_sim`
```

qry\_Player\_List

Flowchart ID: Blue 9.2 | Rev 11-12-2006 4:05 pm

This query is used to generate the contents of the 'Player List' in the Controller panel. It lists the Player's [Unit\_Callsign] followed by their current location ([Location\_ShortName]) and then any PLAYER Messages assigned -- the query DOES NOT include any Location Messages (those are handled in the 'Location List'). The Left Outer Joins are used to insure all players are listed regardless of any messages they may or may not be assigned. Theoretically, all players should always have a location assigned once they sign into a scenario. This query requires a WHERE clause to select the Active Sim (e.g. WEHERE `tbl\_active\_sim`.`SimID` = simulation ID).

Tables

[tbl\_active\_players]  
Contains master records of Players currently participating in scenarios [Active\_SimID], their unit [UnitID], and their current location in the scenario [LocationID]

[tbl\_unit]  
Contains master records of scenarios created by Controller

[tbl\_message\_players]  
Message(s) assigned to Active Players and visible only to that Player

[LocationID]

[tbl\_location]  
Locations in a simulation

[tbl\_message]  
Contains master records of all messages in the database

[MessageID]

```
SELECT
`tbl_active_players`.`Active_PlayersID`,
`tbl_unit`.`Unit_Callsign`,
`tbl_location`.`Location_ShortName`,
`tbl_message`.`Message_Name`
FROM
`tbl_active_players`
Left Outer Join `tbl_unit` ON `tbl_active_players`.`UnitID` =
`tbl_unit`.`UnitID`
Left Outer Join `tbl_location` ON `tbl_active_players`.`LocationID` =
`tbl_location`.`LocationID`
Left Outer Join `tbl_message_players` ON
`tbl_active_players`.`Active_PlayersID` =
`tbl_message_players`.`Active_PlayersID`
Left Outer Join `tbl_message` ON `tbl_message_players`.`MessageID` =
`tbl_message`.`MessageID`
ORDER BY
`tbl_unit`.`Unit_Callsign` ASC
```

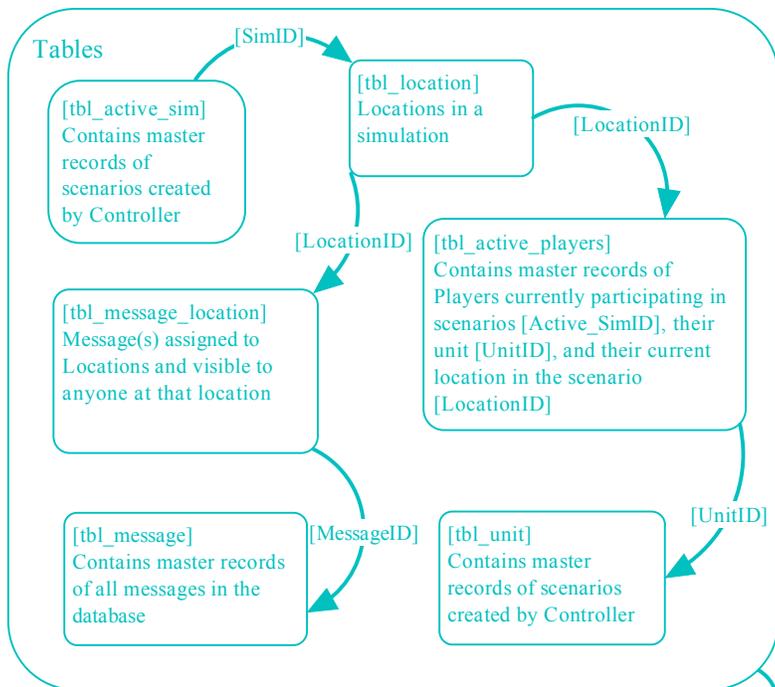


.2), and the Location List (Blue 9.3). These queries are NOT dependent on each other

### qry\_Location\_List

Flowchart ID: Blue 9.3 | Rev 11-12-2006 4:45 pm

This query is used to generate the contents of the 'Location List' in the Controller panel. It lists the Location ([Location\_ShortName]) followed by any Players at that location ([Unit\_Callsign]) and then any LOCATION Messages assigned – the query DOES NOT include any Player Messages (those are handled in the 'Player List'). The Left Outer Joins are used to insure all locations are listed regardless of any players or messages that may or may not be at that location. NOTE there may be none, one, or many PLAYERS and/or MESSAGES assigned to a given location. This query requires a WHERE clause to select the Active Sim (e.g. WEHERE 'tbl\_active\_sim'. 'SimID' = simulation ID).



```

SSELECT
'tbl_location'.Location_ShortName',
'tbl_unit'.Unit_Callsign',
'tbl_message'.Message_Name'
FROM
'tbl_active_sim'
Inner Join 'tbl_location' ON 'tbl_active_sim'.SimID = 'tbl_location'.SimID
Left Outer Join 'tbl_active_players' ON 'tbl_location'.LocationID =
'tbl_active_players'.LocationID
Left Outer Join 'tbl_unit' ON 'tbl_active_players'.UnitID = 'tbl_unit'.UnitID
Left Outer Join 'tbl_message_location' ON 'tbl_location'.LocationID =
'tbl_message_location'.LocationID
Left Outer Join 'tbl_message' ON 'tbl_message_location'.MessageID =
'tbl_message'.MessageID
ORDER BY
'tbl_location'.Location_Sort_Order' ASC

```



The purpose of these queries is to populate the one-time-only lists with data and corresponding [...ID] fields when the Controller Panel is launched. The lists do NOT change during the scenario, only their status may change (e.g. Situation Level radio button will change, but the list of Situation Levels will not change). These queries are NOT dependent on each other and may be run in series or parallel for speed.

qry\_Message\_List  
Flowchart ID: Blue-8.1 |  
Rev 11-11-2006 4:10 pm  
List all messages in the database

#### Tables

[tbl\_message]  
Contains master records of all messages in the database

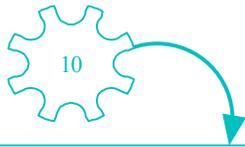
```
SELECT
'tbl_message'.MessageID,
'tbl_message'.Message_Name,
'tbl_message'.Message_Descrip',
'tbl_message'.Message_filename'
FROM
'tbl_message'
```

qry\_SituLevel\_List  
Flowchart ID: Blue-8.2 |  
Rev 11-12-2006 12:30 pm  
List all Situation Levels for the Simulation that is running in the Active Sim (e.g. WHERE tbl\_situlevel.SimID = tbl\_active\_sim.SimID). This query (using a WHERE statement) will return all the available Situation Levels for the specific simulation running. This recordset should be used to populate the 'Situation Level' list in the Controller panel when it loads. The query qry\_SituLevel will then return the [SituLevelID] for the current Situation level. When a Controller selects a radio button for a new Situation Level in the panel, the [SituLevelID] for the new Situation Level is used to UPDATE the tbl\_active\_sim table using Red-'d.'

#### Tables

[tbl\_situlevel]  
Contains master records of Situation Levels for each simulation in database

```
SELECT
'tbl_situlevel'.SituLevelID,
'tbl_situlevel'.SimID,
'tbl_situlevel'.SituLevel_short',
'tbl_situlevel'.SituLevel_desc'
FROM
'tbl_situlevel'
ORDER BY
'tbl_situlevel'.SituLevel_sortorder ASC
```



#### qry\_Message\_Handler

Flowchart ID: Blue-10 | Rev: 11-12-2006 11:10 p.m.

This is a complex query designed to return a matrix of all current Messages (both Player and Location messages) for a given Active Simulation and LocationID (in this example the Location ID is specified as '6' in three WHERE clauses, but the **Active\_SimID is NOT specified and MUST be added**). Though functionally NIMSPRO handles Player messages distinctly from Location messages, it is necessary to allow the Controller to easily manage both as messages will frequently transition from a Location message to a specific Player message and vice versa. Consider MessageID=9 'Victim B Female' as a Location message assigned to 'Entry' (ID-6). When a fire crew arrives at Location 'Entry,' the 'Victim B Female' message will be displayed. Presumably, the fire crew will rescue the victim and remove them from the building. In order for the victim to "come with them," the 'Victim B Female' message must be changed from a Location message at 'Entry' to a Player message assigned to the fire crew. In this way as the fire crew navigates out of the structure, the victim "moves" with them until being turned over to another Player or left at another Location (e.g. outside). This query is NOT an updatable recordset, but it does provide the necessary keys to write an UPDATE to the database. This query uses a DERIVED TABLE.

```
SELECT
`tbl_message`.`Message_Name`,
`tbl_unit`.`Unit_Callsign`,
`tbl_active_players`.`Active_PlayersID`,
DTActive_SimID,
DTActive_PlayersID,
DTSimID,
DTLocationID,
DTSituLevelID,
DTMessageID,
DTMessageType
FROM (
SELECT
`tbl_active_sim`.`Active_SimID` AS DTActive_SimID,
`tbl_active_players`.`Active_PlayersID` AS DTActive_PlayersID,
`tbl_active_sim`.`SimID` AS DTSimID,
`tbl_active_players`.`LocationID` AS DTLocationID,
`tbl_active_sim`.`SituLevelID` AS DTSituLevelID,
`tbl_message_players`.`MessageID` AS DTMessageID,
"Player" AS DTMessageType
FROM
`tbl_active_players`
Inner Join `tbl_active_sim` ON `tbl_active_sim`.`Active_SimID` = `tbl_active_players`.`Active_SimID`
Left Outer Join `tbl_message_players` ON `tbl_message_players`.`Active_PlayersID` = `tbl_active_players`.`Active_PlayersID`
WHERE `tbl_active_players`.`LocationID`=6 AND `tbl_message_players`.`MessageID` IS NOT NULL
UNION
SELECT
`tbl_message_location`.`ActiveSimID`,
`tbl_active_players`.`Active_PlayersID`,
`tbl_active_sim`.`SimID`,
`tbl_message_location`.`LocationID`,
`tbl_active_sim`.`SituLevelID`,
`tbl_message_location`.`MessageID`,
"Location" AS MessageType
FROM
`tbl_message_location`
Left Outer Join `tbl_active_players` ON `tbl_message_location`.`LocationID` = `tbl_active_players`.`LocationID` AND
`tbl_message_location`.`ActiveSimID` = `tbl_active_players`.`Active_SimID`
Inner Join `tbl_active_sim` ON `tbl_active_sim`.`Active_SimID` = `tbl_message_location`.`ActiveSimID`
WHERE `tbl_message_location`.`LocationID` =6
ORDER BY `DTMessageID`
) AS DerivedTable1
Inner Join `tbl_message` ON DTMessageID = `tbl_message`.`MessageID`
Inner Join `tbl_active_players` ON DTActive_PlayersID = `tbl_active_players`.`Active_PlayersID`
Inner Join `tbl_unit` ON `tbl_active_players`.`UnitID` = `tbl_unit`.`UnitID`
WHERE `tbl_active_players`.`LocationID`=6
ORDER BY `DTMessageID`, `tbl_unit`.`Unit_Callsign`
```