

CLAIMS

1. A synchronization mechanism, in a reservation method operating on a multi-server system, for ensuring that the most up to date PNR record is used during a user transaction across at least two servers of the multi-server system, wherein a local context version of the PNR is maintained within each server of the multi server system, the servers being interconnected through a routing means, the mechanism including the steps of:
- maintaining in a shared context storage area, accessible by all servers of the multi-server system, information on the last modified version of PNR;
 - responsive to a user request causing a selected one of the servers to modify the local context version of PNR performing the following actions:
 - checking on the shared context storage area which server last modified the PNR;
 - if the server which last modified the PNR is different from the selected server, obtaining the up to date version of PNR;
 - modifying the local context version of PNR to satisfy the user request;
 - updating the shared context storage area to reflect the last modified version of PNR.
2. The synchronization mechanism of claim 1 wherein the servers of the multi-server system exchange information with the routing means and the user by means of a Service Oriented Architecture (SOA) system.
3. The synchronization mechanism of claim 2 wherein the messages include a message header comprising information on the last modified version of PNR.

4. The synchronization mechanism of any preceding claim wherein information on the last modified version of PNR includes the location of the last modified version of PNR.
- 5 5. The synchronization mechanism of any preceding claim wherein information on the last modified version of PNR includes a pointer to the last modified version of PNR.
6. The synchronization mechanism of any preceding claim wherein the
10 routing means includes a system bus, e.g. an Enterprise Service Bus (ESB).
7. A computer program comprising instructions for carrying out the steps of the method according to any preceding claim, when said computer program is executed on a computer.
- 15 8. A computer program product including computer readable means embodying the computer program of claim 7.
9. A reservation multi-server data processing system, including a
20 synchronization mechanism for ensuring that the most up to date PNR record is used during a user transaction across at least two servers of the multi-server system, wherein a local context version of the PNR is maintained within each server of the multi server system, the servers being interconnected through a routing means, wherein the system comprises one or more components adapted
25 to perform the method of any claim 1 to 6.
10. A service deployed in a data processing system for implementing the method of any claim 1 to 6.

CLAIMS

1. A synchronization method, in a reservation application operating on a multi-server system, the reservation application exchanging travel related information by means of a Passenger Name Record data structure (PNR), for
5 ensuring that the most up to date PNR is used during a user transaction across at least two servers of the multi-server system, wherein a local context version of the PNR is maintained within each server of the multi server system, the servers being interconnected through a routing means, the mechanism including the steps of:

10 maintaining in a shared context storage area, accessible by all servers of the multi-server system, information on the location of the last modified version of PNR;

responsive to a user request causing a selected one of the servers to modify the local context version of PNR performing the following actions:

15 checking on the shared context storage area which server last modified the PNR;

if the server which last modified the PNR is different from the selected server, obtaining the up to date version of PNR;

modifying the local context version of PNR to satisfy the user request; and

20 updating the shared context storage area to reflect the last modified version of PNR.

2. A synchronization method according to claim 1, wherein the servers of the multi-server system exchange information with the routing means and the user by means of a Service Oriented Architecture (SOA) system.

3. A synchronization method according to claim 2, wherein the messages include a message header comprising information on the last modified version of PNR.
4. A synchronization method according to any one of claims 1 to 3, wherein
5 information on the last modified version of PNR includes a pointer to the last modified version of PNR.
5. A synchronization method according to any one of claims 1 to 4, wherein the routing means includes a system bus, e.g. an Enterprise Service Bus (ESB).
6. A computer program comprising instructions for carrying out the steps of
10 the method according to any one of claims 1 to 5, when said computer program is executed on a computer.
7. A computer program product including computer readable means embodying the computer program of claim 6.
8. A reservation multi-server data processing system, including a
15 synchronization method for ensuring that the most up to date PNR record is used during a user transaction across at least two servers of the multi-server system, wherein a local context version of the PNR is maintained within each server of the multi server system, the servers being interconnected through a routing means, wherein the system comprises one or more components adapted to perform the
20 method of any one of claims 1 to 5.
9. A service deployed in a data processing system for implementing the method of any one of claims 1 to 5.