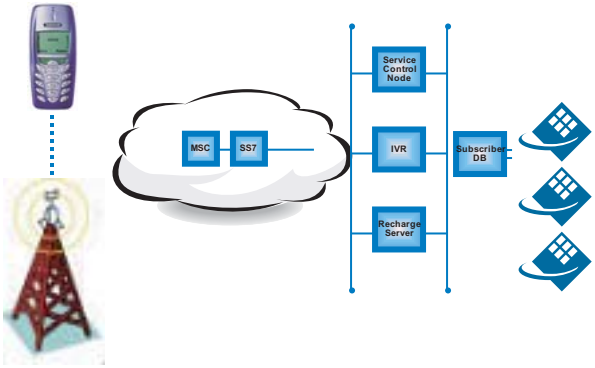
Application Brief

Telecom Solutions

Solid Data File Cache for Wireless Prepaid Services

- Faster access to subscriber data
- Better scalability
- Reduced cost per subscriber
- Enhanced quality of service
- Extra capacity required for 2.5G and 3G services



Wireless Prepayment Architectural Elements

Prepaid services are data driven - constantly accessing subscriber balances and service profiles. The speed at which this critical subscriber data can be accessed is a key differentiator, determining the scalability and quality of service offered by the prepaid solution.

Integrating Solid Data's file-caching systems into wireless prepaid platforms can significantly increase access to this mission critical data, reducing the infrastructure investment required for each mobile subscriber while delivering enhanced levels of service. The figure below shows how file cache can be added to an existing wireless prepaid platform.

Using modern SDRAM technology and patented access algorithms, Solid Data file cache provides a reliable, persistent server acceleration capability that recovers server performance lost to platform latency.

Scalability

Speeding up access to data across the platform results in better server scalability and performance. In signal server environments overall capacity is increased. In clustered environments less nodes need be deployed to achieve the same capacity. Additionally, less hardware means less rack space, less power, and less cooling - all key restrictions in today's overcrowded switch sites. This results in an overall lower platform cost, which provides increased profitability.

Subscriber Benefits

For mobile subscribers, lower platform latencies lead to faster access of their credit balance and subscriber profile. This leads to improved quality of service in at least four ways:

- Service Control Nodes take less time accessing credit balances so call set-up can be performed more quickly.
- Recharge Servers have less delay when updating subscriber balances providing subscribers with a faster, more responsive user experience.
- Similarly, faster access to subscriber balances will make IVR recharge mechanisms quicker, reducing call times and freeing up voice channels more quickly.
- When billing for packet based services, more frequent updates of credit balances will be possible providing customers with more timely and accurate account information and helping operators reduce fraud.

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Enhanced Services

Lowering the cost of prepaid credit and debit transactions helps clear the way for prepaid billing in a number of new areas, such as:

- Access to foreign networks for CAMEL based prepaid roaming.
- Bulk SMS delivery by value-added service providers.
- Capture of telemetry data and other bulk SMS origination.
- Micro-payments for premium WAP services.
- Customer Self Care

Integration with New or Existing Platforms

Solid Data file cache is compatible with all major UNIX®, Linux® and NT® platforms, via UltraSCSI and Fibre Channel interfaces, making them a plug-and-play enhancement to a new or existing infrastructure. Available in 100-250V AC and -48V DC variants. Full NEBS Level 3 compliance is also available with the -48V DC unit.

Solid Data file-caching systems are the leading choice worldwide for high-reliability, high transaction telecom networks. More than 42 mobile operators in 23 countries use our technology for core network and value-added services (VAS) in 2G, 2.5G, and 3G implementations.

For additional information,
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SolidData®

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