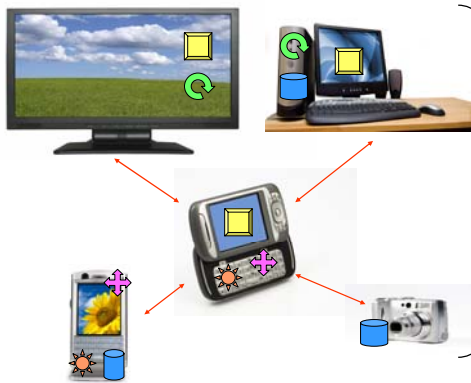


Dynamically Composable Computing System Architecture

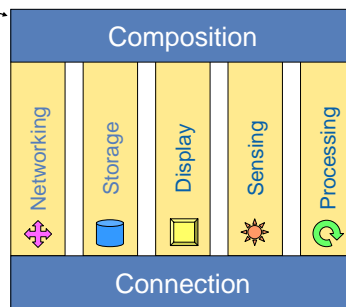
Dynamically Composable Computing (DCC) enables a disparate set of wireless computing resources to be combined together into one unified platform. These dynamic platforms will allow users to both extend the capabilities of individual devices they possess as well as combine multiple devices together to form a more powerful computing experience.

Device Composition

Resources from distributed devices can be combined to form a more flexible platform:



What system architecture is necessary to support dynamic system compositions?



How do the various system components communicate across the collected system?

DCC technologies provide the means to connect and manage traditional computing resources across a cluster of devices...

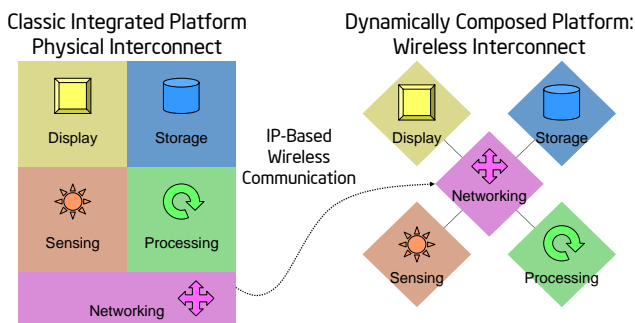
How does the system aggregate composed resources into a unified view?

The system architecture for DCC is based around three basic principles:

- Collections of disparate devices providing resources for a dynamically composed platform
- Universal connectivity provided by a high-speed wireless network
- Distributed system resources aggregated into a unified system view

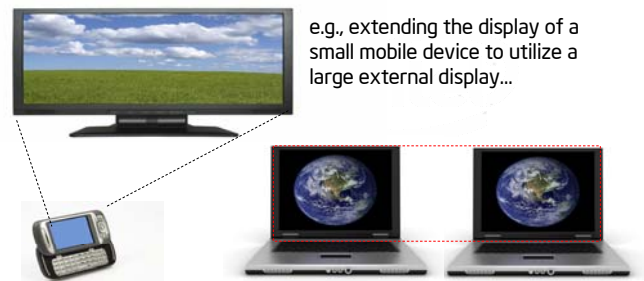
Universal Connectivity

Wireless interconnectivity mechanism allows for a mix of integrated and composed configurations:



Resource Abstraction

Each distributed resource requires new techniques to be effectively shared:



e.g., extending the display of a small mobile device to utilize a large external display...

...or combining mobile displays to create a larger shared workspace.

Team: Roy Want, Trevor Pering, Barbara Rosario, Shivani Sud and Alex Nguyen