Collaborative Mobile Data Management in Infostation Networks

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Motivation
• Expensive WAN connections
• Devices with limited and varying capabilities
  • Low power
  • Limited processing power
  • Smaller display
  • Limited memory
• Mobile disconnected operation
• Applications with larger data requirements
  • Multimedia
• Infostations offering low cost islands of high speed connectivity

Proposed Solution
• Infostations actively schedule data delivery to the devices in need.
• Infostations identify the mobile hosts that do not have enough data storage to store the data requested by the user.
• The Origin Infostation notifies the Next Infostation along the devices route about the device limitations.
• The Next Infostation identifies the carrier devices heading towards this device in need.
• The carrier device is given the data volume to be delivered to this device in need.