

## Digital Home Networking Solution

Today broadband, wireless home network and digital devices do not require any introduction. With the emergence of high-speed broadband and powerful gadgets, a typical home is flooded with digital content and home networks. However, the major drawback is that these devices are not interoperable. Content in one device cannot be shared with other devices in the home environment. At the same time, new forms of digital entertainment and mobile devices are introduced everyday.

### Overview

Digital Living Network Alliance (DLNA) is an innovative new technology which enables consumer products to easily share digital content with other devices in the home environment. It constructs a 'digital home' by networking home entertainment devices, Personal Computers (PCs) and mobile devices. It makes them interoperable so that digital content such as photos, music, and videos can be seamlessly shared and played. A typical example of home networking solution is shown in Figure 1.

It is essential for Original Equipment Manufacturers (OEM) to adapt to these changes to remain abreast of the latest technology trends and maintain a unique position in the market. The challenge lies in striking a balance between development costs and leading the introduction of innovative and high-quality products to consumers.

At Tata Consultancy Services (TCS), our Digital Home for IP-networked devices is a comprehensive DLNA solution on low power Intel Atom platform which supports controlling, uploading, downloading, as well as server features for various devices. Full of innovative features, it is highly suited for devices like media players, mobile devices, digital TVs, digital cameras and more. Figures 2 and 3 illustrate few examples of the role our solution plays in a typical home networking environment.

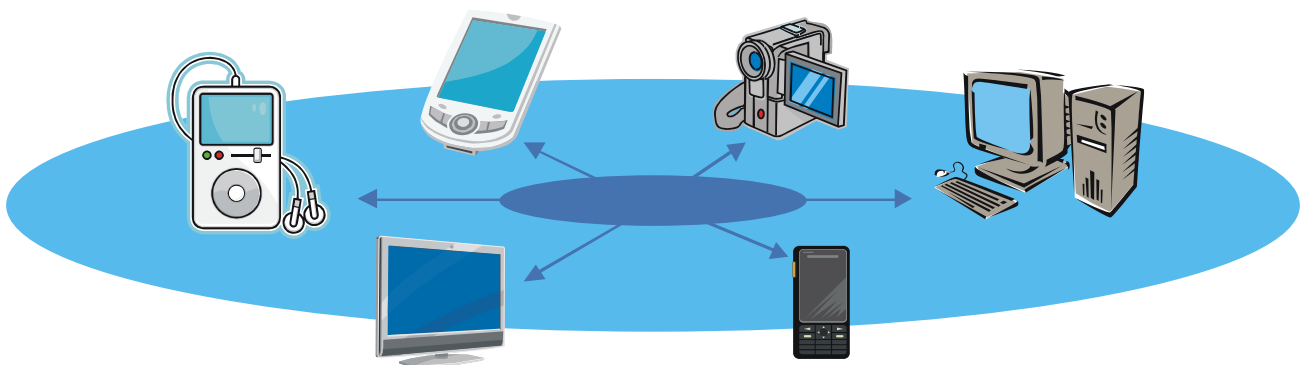


Figure 1: A typical digital home networking environment

## TCS Digital Home Networking Solution

### Digital Server Solution

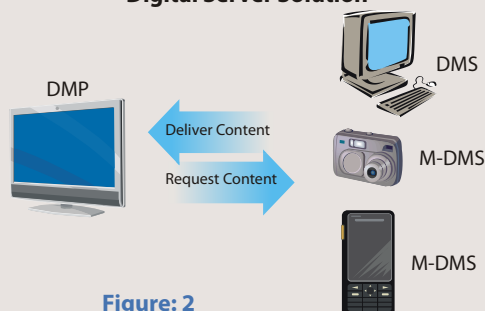


Figure: 2

Shares content stored in a PC, digital camera, mobile phone, etc., and transfers it over the home network. Shared content can be played on an appropriate player device like a TV.

### Digital Controller Solution



Figure: 3

Obtains a list of storage and display devices available in the home network, such as PC, digital camera, mobile, etc. It also chooses the source and destination devices for content transfer. Selected content can then be displayed on destination devices like a TV.

### Device type supported

- Digital Media Server (DMS)
- Digital Media Controller (DMC)
- Mobile Digital Media Server (M-DMS)\*
- Mobile Digital Media Controller (M-DMC)\*
- Mobile Digital Media Uploader (M-DMU)\*
- Mobile Digital Media Downloader (M-DMD)\*

\* Under development

### About Tata Consultancy Services (TCS)

Tata Consultancy Services is an IT services, business solutions and outsourcing organization that delivers real results to global businesses, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled services delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development.

A part of the Tata Group, India's largest industrial conglomerate, TCS has over 148,000 of the world's best trained IT consultants in 47 countries. The company generated consolidated revenues of US \$6 billion for fiscal year ended 31 March 2009 and is listed on the National Stock Exchange and Bombay Stock Exchange in India. For more information, visit us at [www.tcs.com](http://www.tcs.com)

### Applications

- Digital set-top box
- Digital video recorders/ cameras
- Mobile phones
- Digital TV
- PDA
- Multi media player

### Deliverables

- Solution on an embedded platform which integrates DMC, DMS and DMR
- Test report
- User guide
- Documentation

### Contact Us

To know more about TCS' Digital Home Networking Solution, contact us at [corporate.engineering@tcs.com](mailto:corporate.engineering@tcs.com)

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