Tizen Micro, small footprint Tizen for headless IoT devices

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What Tizen has been focusing on

Common

- 3D UI
- Multi-User
- 64-bit
- KDBUS
- Crosswalk
- Wayland
- SMACK

Tizen Base OS

Profiles

Mobile

OSP | NFC

Enlightment | Security Container | Telephony

Automotive

Weston | AMB

GENIVI Layer Manager | GENIVI Audio Manager

TV

Watch

Devices

Tizen Micro aiming at more ‘smart things’

Micro Common

- Remote Configuration
- Device Mgmt.
- Media Processing
- Security
- Comms Framework
- Connectivity
- Base OS

+

New Segments

Smart Home Gateway
- Router subsystem.
- Storage & File services
- Plug-in Frwk

Smart IP Camera
- ISP
- Visual Computing
- Streaming

Smart Home Appliance

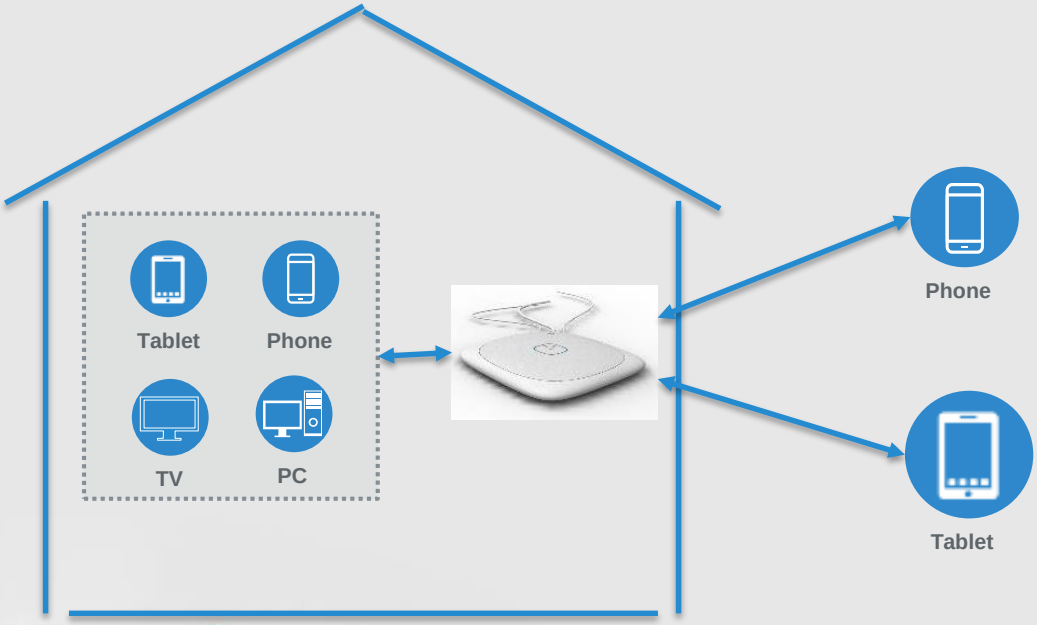
Smart Robot

Things

Headless, Small Footprint, Multi-tasking, Highly Configurable

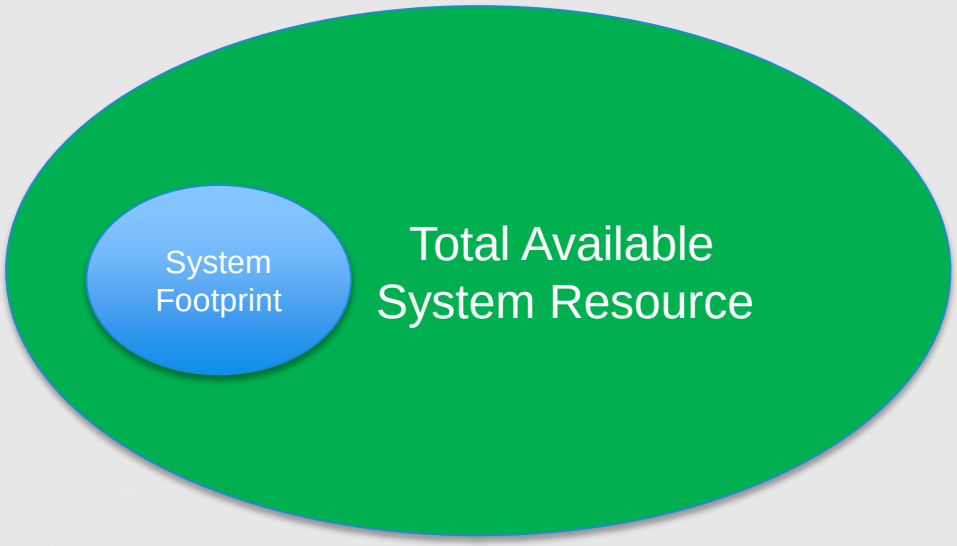
Headless (无显示)

- No display system. No compositor
- User interaction via remote screens
- Graphics & Media engines are still useful for data processing and analytics, though optional
- Should be smarter and smarter to reduce user interaction



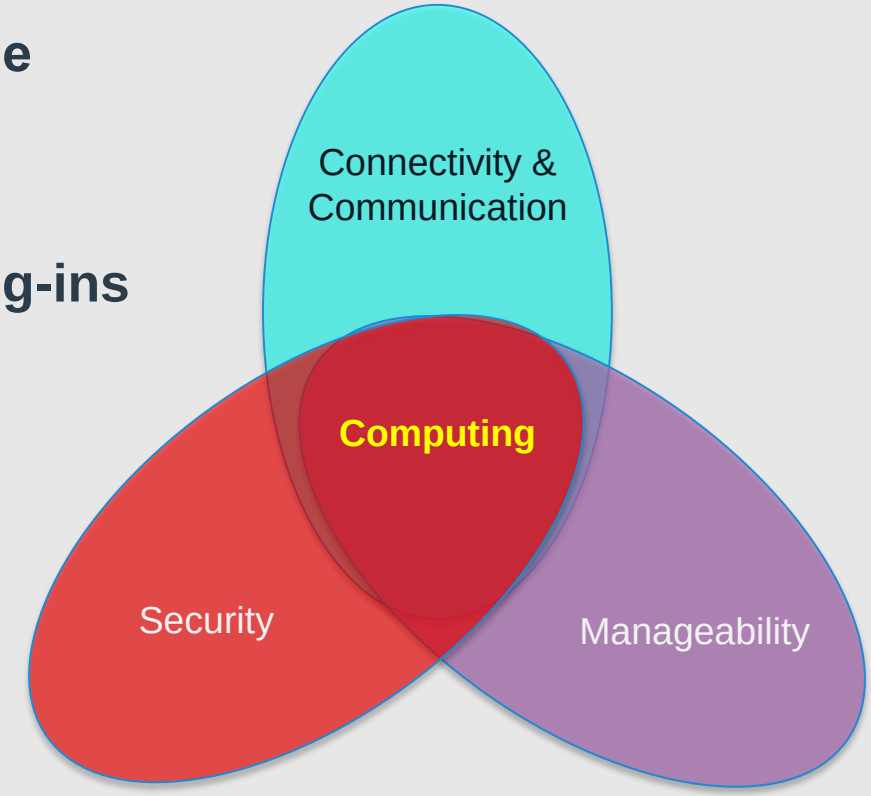
Small Footprint (小尺寸)

- **Small system footprint**
  - Memory < 128MB
  - Storage < 256MB
- **The majority of capacity is reserved for applications**



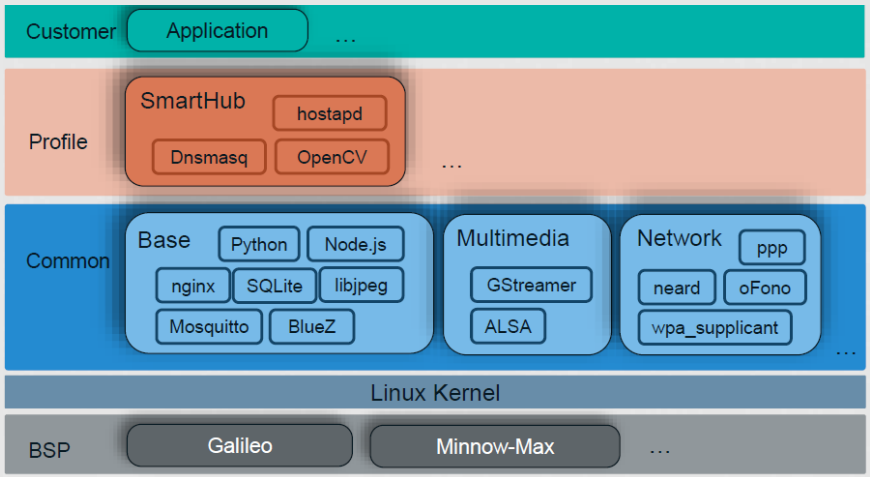
Multi-tasking (多任务)

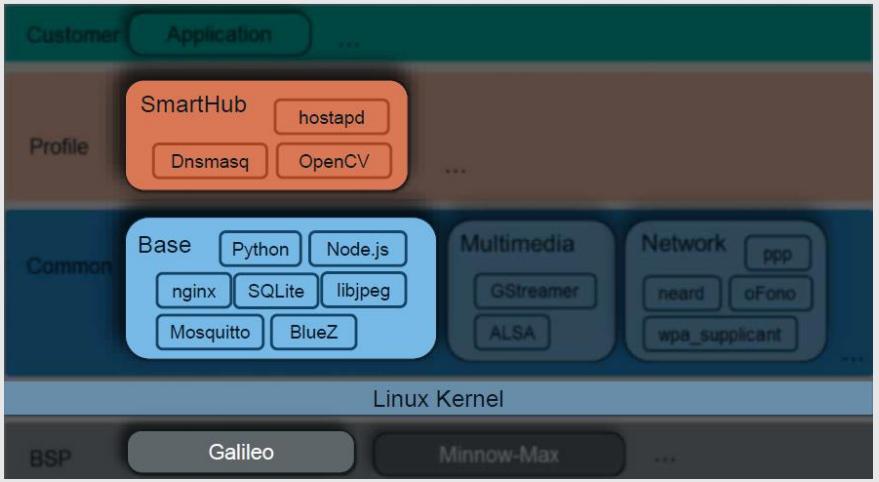
- It’s not for single purpose usage
- Multiple workloads in parallel
- Tasks can be prioritized
- Extendable for new apps or plug-ins



Highly configurable (高可配置性)

- **Build with Yocto tools**
- **Micro common → segement specific recipes**





Micro common

Segment specific recipe

Initial BOM list

- Base: Linux kernel, busybox, dropbear
- Connectivity: BlueZ, Connman
- Communication: mosquito (MQTT)
- Media: openCV, libav, miniDLNA
- Database: sqlite
- File service: Nginx (http)
- Development: node.js, python

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