

ALL04

# Service Management for OS/2 and eComStation

# Overview

- What is available ?
- Service Management in General
- Achitecture Design Overview
- Security Issues
- Roadmap

What is available ?

## What is available (I/III)

- Service Management on other platforms
  - Unix/Linux
    - various implementations with
      - different GUIs
      - commandline tools to configure and start/stop
  - Windows
    - Service folder with Services in it
    - commandline interface NET.EXE to start/stop
    - Windows ResourceKit Tool to register any application as a service

## What is available (II/III)

- Service Management under OS/2 and eCS
  - only as a part of File&Print Client or LAN Requester
    - having services such as
      - Peer Service or Requester Service
      - Messenr Service
  - requires a NetBIOS compatible protocol stack (unnessecary overhead)
  - not extendible (means »dead end«) as
    - interface not documented, no new services possible
    - owned by IBM (partial MS)

## What is available (III/III)

- nothing more so far...

The new Service Management System is being developed to fill the gap!

# Service Management in General

## Service Management in General (I/III)

- A service
  - is a piece of software
  - is running in background
  - is serving data or functionality to (front end) applications of the local or remote systems
  - has a defined state such as inactive, running, paused



## Service Management in General (II/III)

- A Service Management System
  - holds information about each service
  - starts, stops, pauses or resumes a service by user interaction
  - starts services automatically on system startup
  - monitors running services, taking configured action on failure
    - restart service, reboot system, execute user defined command

## Service Management in General (III/III)

- A Service Management System
  - provides an Application Programming Interface (API) for system provided and for external programs to
    - register/deregister services
    - set/modify configuration data for services
    - execute actions on services (start/stop/etc.)
  - provides a (G)UI to
    - start/stop the Service Management System
    - modify configuration data for services
    - execute actions on services

# Architecture Design Overview of the New Service Management System

## Architecture Design Overview (I/VIII)

- Design basics for developers, power and end users
  - intended as a integral base component of forthcoming versions of eComStation
  - part of a new open source project of netlabs.org called »Netlabs Workplace Shell Extension Project«
  - will come with Workplace Shell GUI, commandline programs and REXX interface
  - readable configuration data in XML format

## Architecture Design Overview (II/VIII)

- Design basics for developers (of installation programs)
  - part of a new open source project of netlabs.org called »Netlabs Workplace Shell Extension Project«
  - public API will be included in the »Workplace Shell Toolkit«, WPSTK runtime will be shipped with forthcoming eComStation versions

## Architecture Design Overview (III/VIII)

- Components of the Service Management System
  - Background Manager Daemon
  - GUI
  - Commandline utilities
  - API for access to daemon by all above components
  - services
    - samples provided with the package
    - external applications being run as a service

## Architecture Design Overview (IV/VIII)

- **Background Manager Deamon**
  - monitors services
  - takes any action on services
    - register, deregister, start, stop, pause, resume
  - is being triggered by the API
  - requires a database to store management information on services

## Architecture Design Overview (V/VIII)

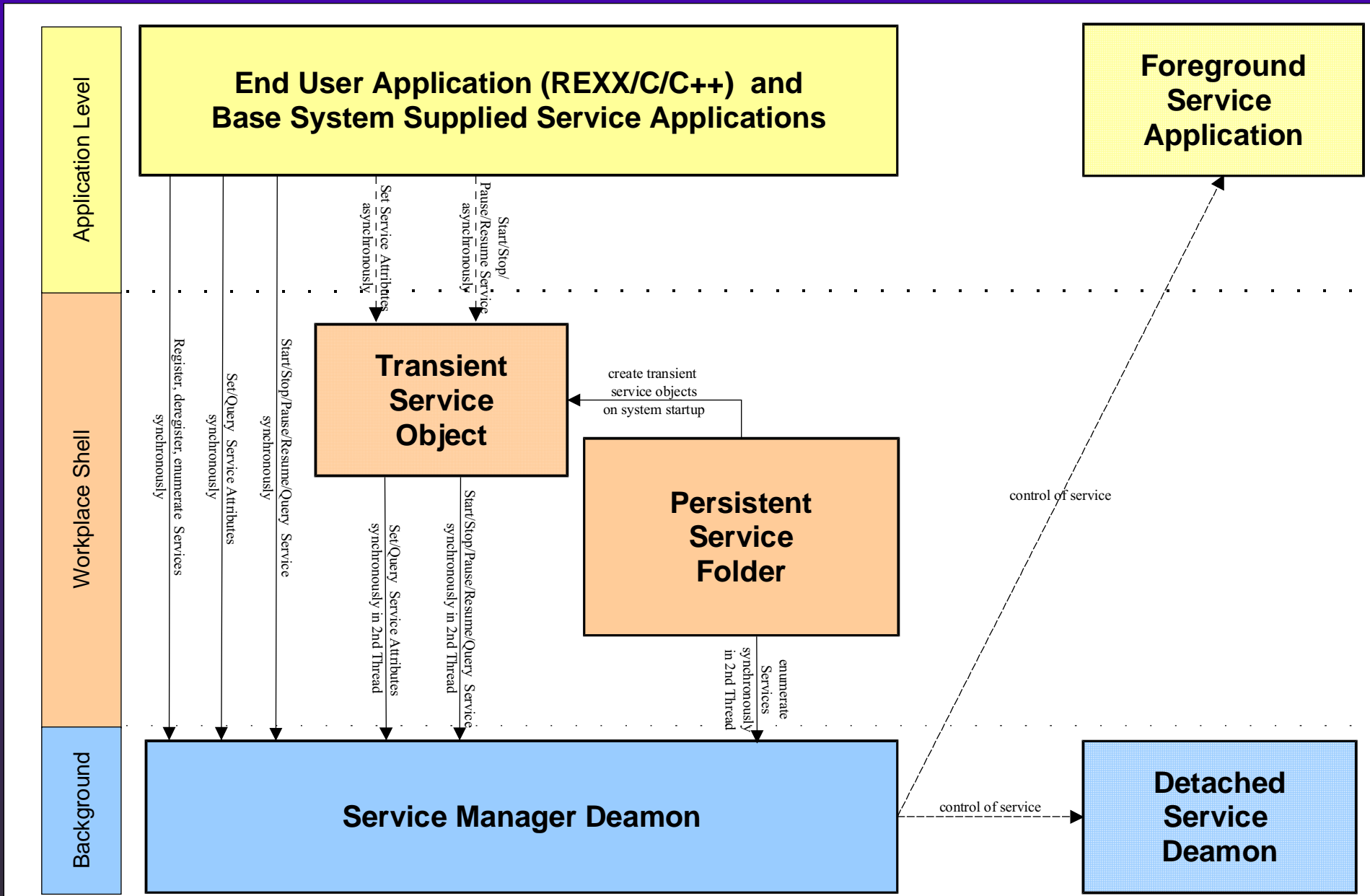
- Service Managment Configuration Database
  - is stored in XML format
  - per service holds attributes like
    - startup type (autimatic, manual, disabled)
    - program type (detached, windowed, fullscreen, PM)
    - view (minimized, maximized, hidden,default)
    - security information
    - commands to execute on failure
    - commands to execute service actions
      - start/stop/pause/resume/query



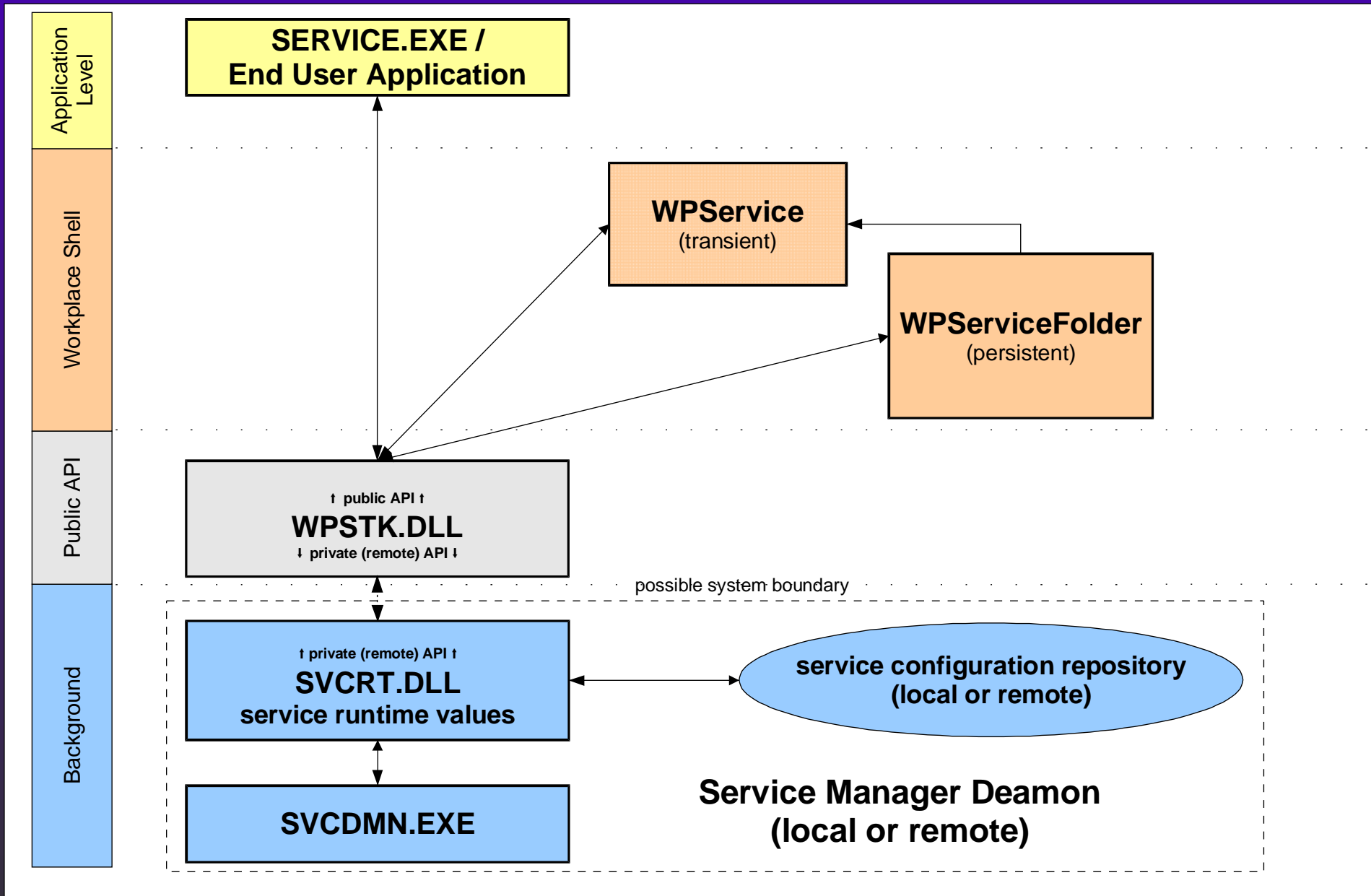
# Architecture Design Overview (VI/VIII)

- public API
  - providing access to all actions of the Service Management Deamon
    - start/stop the Service Managment Deamon
    - start/stop/pause/resume/query services
  - used by
    - command line utilities, supplied with the package/base operating system
    - GUI components
    - external programs such as installation programs

# Service Management System Architecture Overview



# API Module Overview



# Security Issues

## Security issues

- Integration of Security/2 support
  - will be used where installed
  - secured will be
    - access to the Service Management System configuration Database
    - any actions on the Service Management System and its services

# Implementation Roadmap

## Implementation Roadmap

- 1) Basic Repository Access in SVCRT.DLL,  
Private API
- 2) WPSTK interface Private to Public API,  
VIO frontend SERVICE.EXE
- 3) WPS GUI frontend
- 4) Security integration
- 5) Remote Access

## Implementation Roadmap

- Implementation started in May 2005
- was soon paused for Wireless LAN Monitor
- will continue in 2006
- first release expected around 2Q2006



Your questions ?

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  - with free programs for OS/2 and eComStation
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# my OS/2 programs and activities

- author of
  - Wireless LAN Monitor
  - Internet Assistant for OS/2 and eComStation
  - Netlabs EPM Distribution
  - HyperText/2, Netlabs Open Source Archive Administrator and Client, Animated Mouse Pointer for OS/2, Task List Hide, SendYes!, EuroCalc, lots more...
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  - planning and/or supporting events of Team OS/2 Germany
    - local fairs, Warpstock Europe events

**Thank you very much  
for your attention !**

See the author during  
Warpstock Europe 2005  
at the booth of  
Team OS/2 Germany