Documentation Library

Differences between Basic and Advanced Terminal Emulation

aXes all versions

When to use TS1 and TS2

Feature and differences

Features and differences define the roles aXes Terminal Server basic (TS1) and advanced (TS2) play for 5250 terminal emulation and application modernisation using screen enhancements and extensions.

Features	TS1	TS2	Comments
5250 terminal emulation	Yes	Yes	
Application modernisation	Basic	Advanced	TS2 is more suitable for application modernisation than TS1.
Supports 5250 terminal keyboard	Yes	No	TS2 can map a 5250 keyboard but it is designed for PC keyboards.
Screen enhancement	Basic	Advanced	
Developer mode	Basic	Advanced	
Browser support	IE	Any	Use TS2 for browsers other than IE.

Terminal emulation

5250 terminal emulation reproduces the characteristics of a physical 5250 terminal device in a browser. The screen layout is the same as the 5250 screen and the PC keyboard adopts the terminal keyboard layout, e.g. the right-hand Ctrl key becomes the Enter key.

The objective of the emulation software is to reproduce a terminal device.

HTML, CSS and JavaScript can provide additional features such as the ability to apply colour schemes and choose fonts to change the appearance of the screen.

For terminal emulation aXes recommends using TS2.

TS1 is appropriate if strict terminal emulation is a requirement.

Modernisation

Modernisation is a process that transforms 5250 applications so that they become more agile, flexible and able to cope with new and enhanced technology, but more importantly, are ready to evolve with changing business demands.

In the case of aXes, modernisation changes the screens so that they look less like a terminal and more like a web application. This manifests itself in the screen layout, colour scheme, graphical controls and the addition of data that is not part of the 5250 terminal screen.

aXes recommends using TS2 for modernisation projects.

Content © LANSA Group
All Rights Reserved

TS1 provides basic screen enhancement and is not the tool to use when modernisation is the requirement.

TS1

TS1 is a 5250 terminal emulator designed for customers who want to use 5250 applications as they would have used them on terminal devices. It preserves the characteristics of a 5250 terminal when displaying screens as HTML pages in a browser, and follows the layout of 5250 terminal keyboards. TS1 can map a PC keyboard to behave as if it were a 5250 keyboard.

TS1 is designed for a least effort deployment of screens from 5250 applications as HTML pages rendered in a browser and works out-of-the-box without development effort.

TS1 allows screen enhancement but provides less enhancement flexibility than TS2.

TS2

TS2 can be used as a 5250 terminal emulator without screen enhancement.

TS2 is designed for customers who want to modernise their 5250 applications by designing pages that do not look like a terminal screen and adding data from other sources. LANSA designed TS2 to be a web application rather than terminal screens presented in a browser.

Moving away from strict 5250 terminal emulation has been a deliberate policy to expand the possibilities for enhancing screens. TS2 includes much more JavaScript than TS1, thereby allowing TS2 to be more flexible with extensions and screen enhancement. This flexibility makes strict 5250 emulation more complex.

The keyboard operates as a PC keyboard and not an emulated 5250 terminal keyboard. TS2 allows developers to map 5250 keyboard functions to keys on the keyboard.

Use cases for TS1 and TS2

Enhancement means changing the screen using extensions and embellishments.

Embellishment means adding decorative detail (e.g. gradient colours and images) to screens.

Screen extension changes the way the screen operates by adding graphical user interface controls such as drop-down lists, radio buttons, check boxes, group boxes, scroll bars, sliders, progress bars, status boxes, search boxes, and tool tips.

Extension also includes the addition of data on a screen obtained from sources other than the 5250 screen.

Use Cases	TS1	TS2
5250 terminal emulation, without extensions or embellishments	Yes	Yes
Strict 5250 terminal emulation with 5250 keyboard layout	Yes	Yes, but TS2 is designed for the PC keyboard layout.
Requirement for additional fields on the screen from sources other than the 5250 screen	No	Yes
Requirement for business rules in the user interface	No	Yes

Content © LANSA Group
All Rights Reserved

Use Cases	TS1	TS2
Requirement for screen enhancement and embellishment	Possible but not recommended. Use TS2 for more flexible enhancement tools.	Yes
No requirement for screen enhancement	Yes	No

Q&A

Questions	Answers
Can I operate TS1 and TS2 simultaneously?	Yes. You can operate a TS1 session in one window and a TS2 session in another window simultaneously.
Can I use TS1 to enhance screens?	Yes. TS2 is the recommended tool.
Can I use TS1 with Android devices?	No, use TS2.
Can I use TS1 with Chrome?	No, use TS2.
Can I use TS1 with Firefox?	No, use TS2.
Can I use TS1 with Internet Explorer?	Yes.
Can I use TS1 with iOS devices?	No, use TS2.
Can I use TS1 with Safari?	No, use TS2.
Can I use TS2 for terminal emulation?	Yes.
Can I use TS2 with Android devices?	Yes.
Can I use TS2 with Chrome?	Yes.
Can I use TS2 with Firefox?	Yes.
Can I use TS2 with Internet Explorer?	Yes.
Can I use TS2 with iOS devices?	Yes.
Can I use TS2 with Safari?	Yes.
Do I have to use TS2 to enhance screens?	No. You can enhance screen using TS1 or TS2. TS2 is the recommended tool.

Content © LANSA Group
All Rights Reserved

Questions	Answers
What is the primary difference between TS1 and TS2?	TS1 is designed to transform 5250 screens into Web pages and screen enhancement is a later addition. TS2 is designed for application modernisation and screen enhancement as its primary purpose. It also offers terminal emulation.
What is the recommended tool for enhancing screens?	TS2
Will aXes enhance TS1 with new features?	No. New features will be added to TS2.

Content © LANSA Group
All Rights Reserved