Why is Tree Survey needed?

(KX-UDS/UDT series)

No. 41-015

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Ver.1.0

Panasonic Corporation

Abstract about this document

This document describe about the necessity of Tree Survey and 2nd Master CS.

Revision history

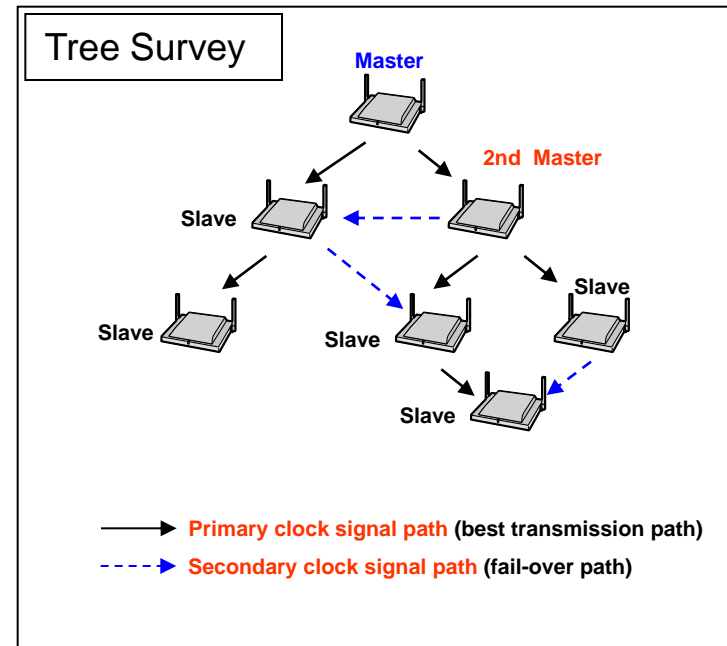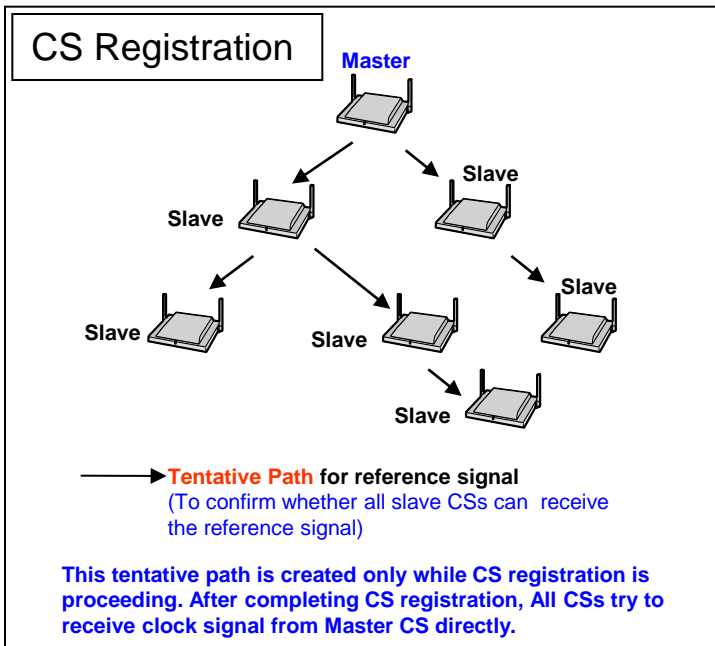| Date	Version	Revision	Firmware version
Aug. 31, 2012	Ver. 1.0	Initial Release	All versions

Why is Tree Survey needed?

1. **CS registration and Tree Survey have different purposes as below,**

   CS registration:
   1)Grouping CSs in each air synchronization group.
   2)Confirming the transmissive region of reference clock signal from master CS.

   Tree Survey:
   1)Deciding the primary clock signal path (best transmission path) from master CS.
   2)Deciding the secondary clock path (fail-over path) from master CS.
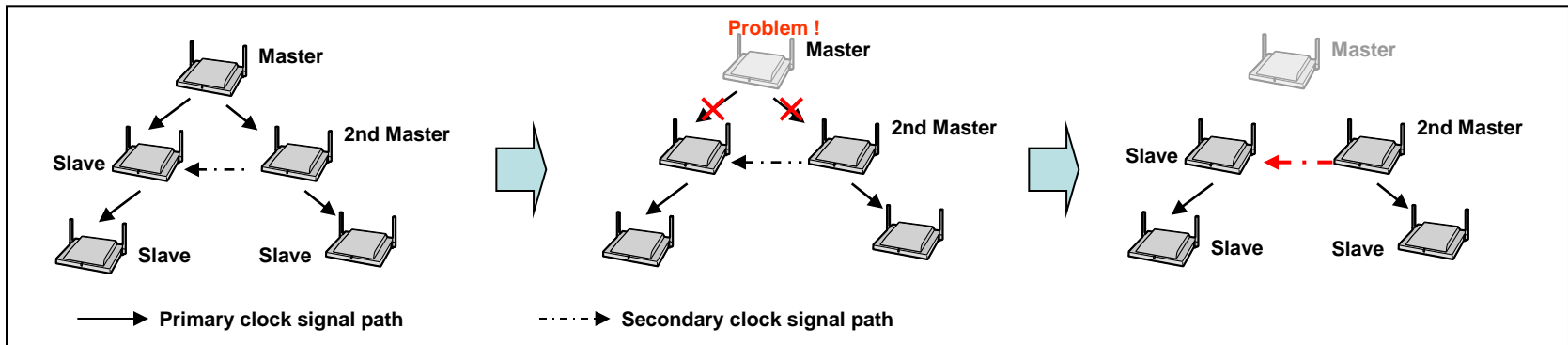   3)Deciding the 2nd master CS.

CS Registration

Master
Slave
Slave
Slave
Slave
Slave
Slave
Slave

→ **Tentative Path** for reference signal
(To confirm whether all slave CSs can receive the reference signal)

This tentative path is created only while CS registration is proceeding. After completing CS registration, All CSs try to receive clock signal from Master CS directly.

Tree Survey

Master
2nd Master
Slave
Slave
Slave
Slave
Slave
Slave

→ **Primary clock signal path** (best transmission path)
---→ **Secondary clock signal path** (fail-over path)

Please refer to next pages about "2nd master CS".

What is 2nd Master CS?

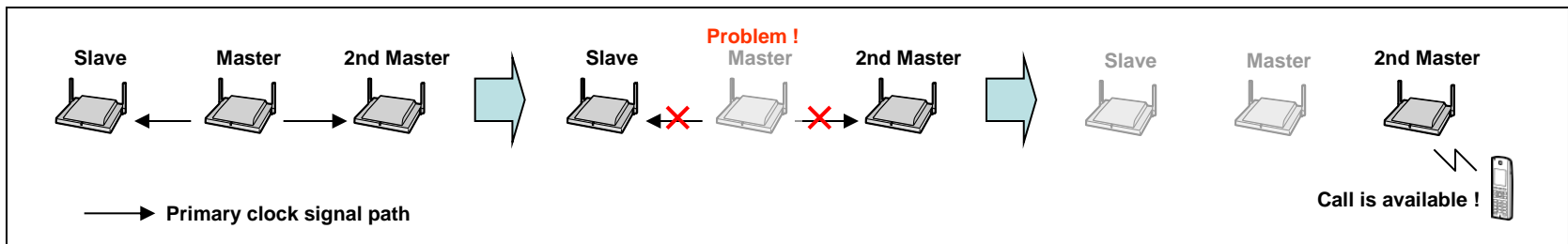## 1. Fail-over for air synchronization when Master CS has trouble

If a Master CS stop reference signal for air synchronization, all CSs in same air synchronization group stop signaling and PS becomes unavailable.
In this case, 2nd Master can signal the reference instead of a Master CS tentatively.

2. Minimum guarantee against Master CS trouble

If a Secondary master CS exists, even if a Master CS has trouble, customer can use handset near the 2nd master CS and call administrator or dealer to solve the problem from handset.

How do you set 2nd Master CS?

1. With Web UI (or CS Maintenance tool)

You can set one CS as 2nd Master CS at the stage of Tree Survey.
A Secondary CS is assigned automatically after tree survey.

2. With Configuration file

Following parameter assigns the CS to 2nd Master CS.

WL_CS_CLASS="SecondMaster"