InnoOSR

Daniel Fan
Flash Department
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Agenda

- InnoOSR Project Overview
- Project Spec
- Implementation Process

InnoOSR Project Overview

- OSR stands for
  - On-Site Recovery
  - Operating System Recovery
  - Standalone InnoAGE, with InnoOSR family, we cut out the remote control functions but kept crucial OS back up part.

- Advantage of InnoOSR
  - Low Maintenance Fee → No advanced technical training needed
  - No Cloud Service → No network rebuilding
  - No SW back-up Compatibility Issue → LBA to LBA Back-up
  - Minimum HW change to customer →Standard 2.5” / 2242 FF with Pin Headers

innoOSR Project Overview-2

- Provide single device back-up
  - Optimized User space
  - Back-up image management via OS-based OSR Tool (InnoAGE Client)

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Project Spec

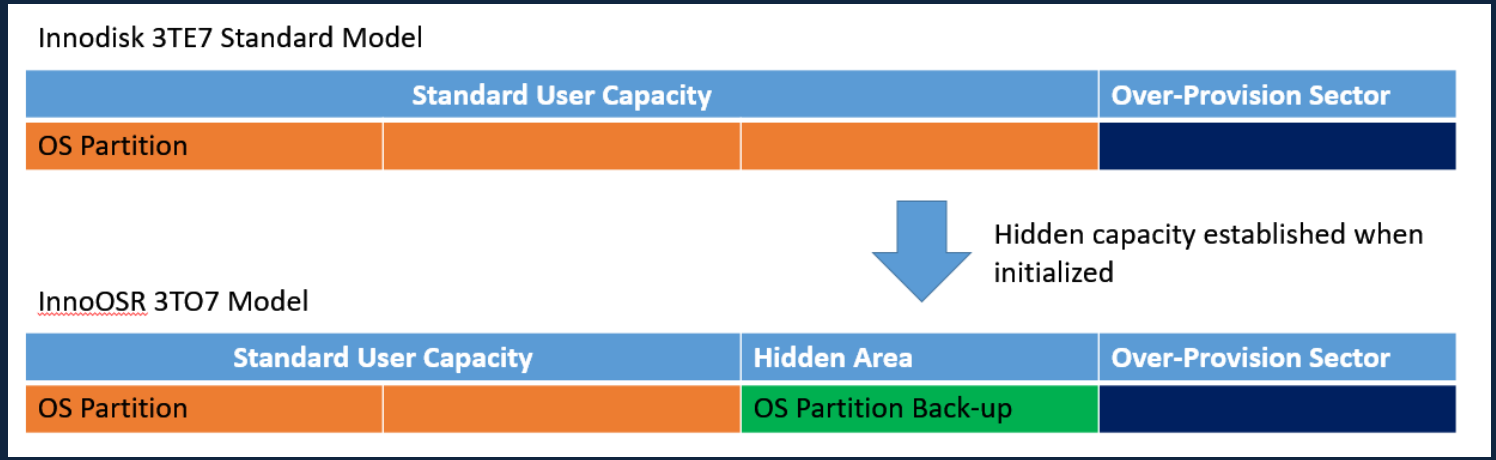
- HW
  - 2.5” Full-sized PCBA will be the first OSR project sample ready in July
  - M.2 2242 will be sample ready in August
  - Device side
    - GPIO Connection Needed
      - Via External Pin Header
    - SATA Vendor CMD
      - Via Standard SATA Connector
  - Host I/O Side
    - Push button via antenna hole & other chassis opening

Project Spec-2

- FW
  - Base on 3TE7
  - Receive SATA CMD to perform Back-Up
  - Via SATA CMD or GPIO Signal as Trigger to launch recovery process
  - During recovery process, LED signal will blink until process is complete

Project Spec-3

- FW
  - OSR Hidden Area



- Original User Capacity will be partially hidden. 10/20/30 GB on standard PNs
- Hidden OS partition back-up part will not show in user's OS
- Hidden partition will be erased if QE/SE/AES crypto-erase initiated

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Project Spec-3

- SW
  - Preparing Windows & Linux OSRtool
  - OSRtool Security Feature in late Q3
  - Back-up image auto-renewal in discussion

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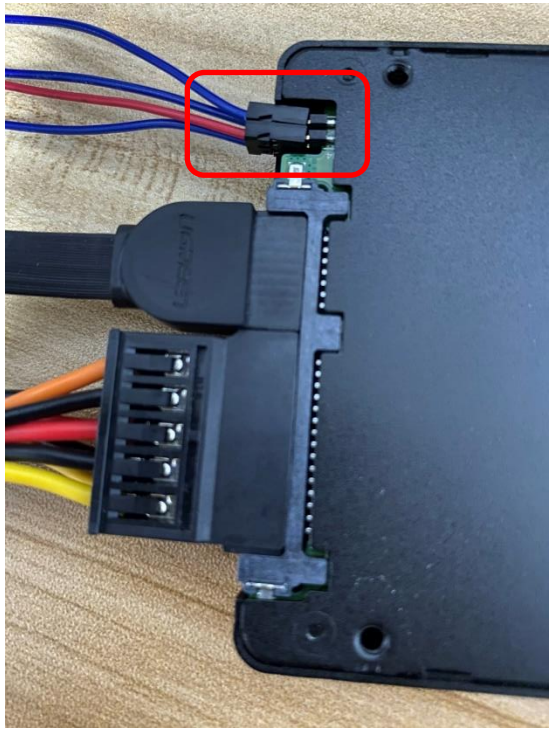
Implementation Process

Scenario Flow

innodisk

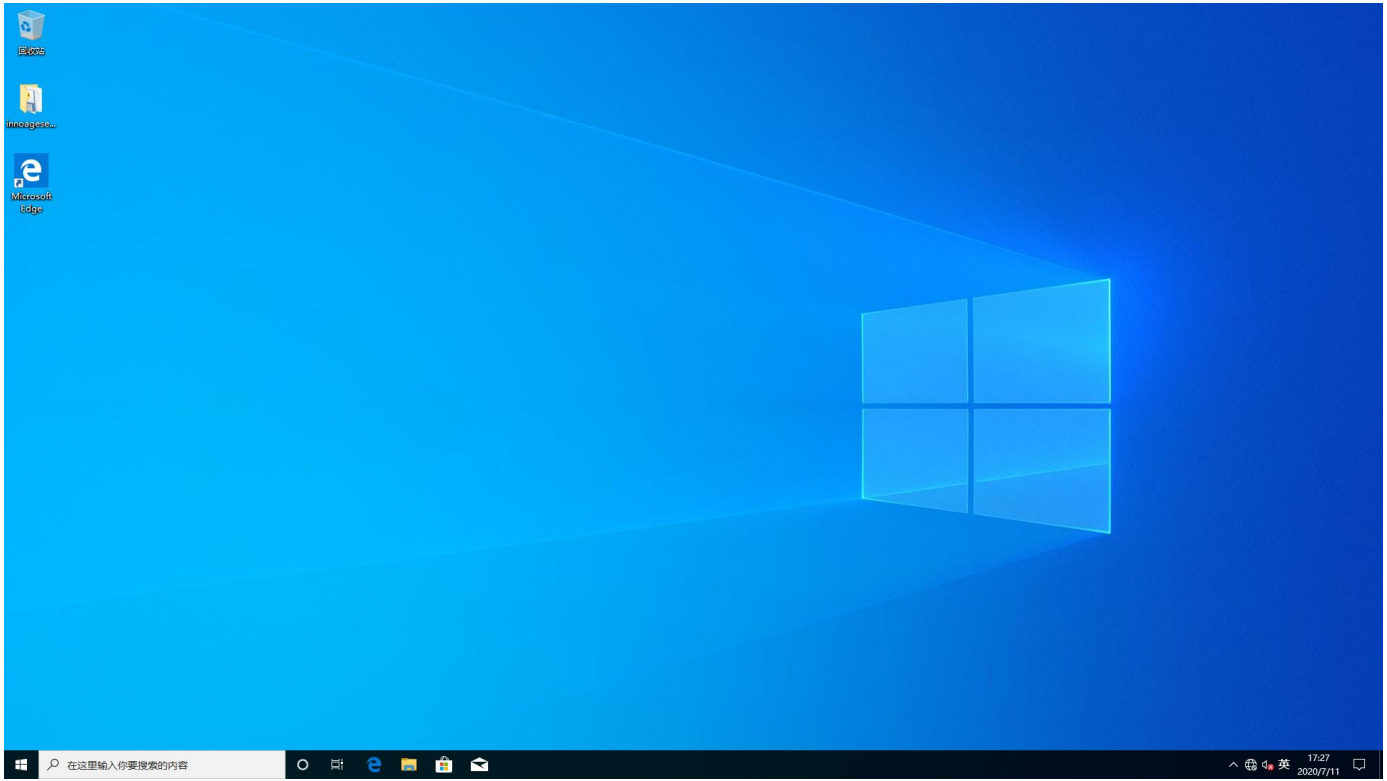
1. Connect Device to host system and triggering cable
2. User install OS with OS partition smaller than chosen hidden area
3. Use OSRtool in Windows or Linux environment
    1) Partitions detection
    2) User choose partitions to be backed-up
    3) OSRtool confirms sufficient hidden area
    4) Perform back up
4. In case of OS damaged, SATA CMD & GPIO can both be used to trigger recovery process

InnoOSR IO Setup



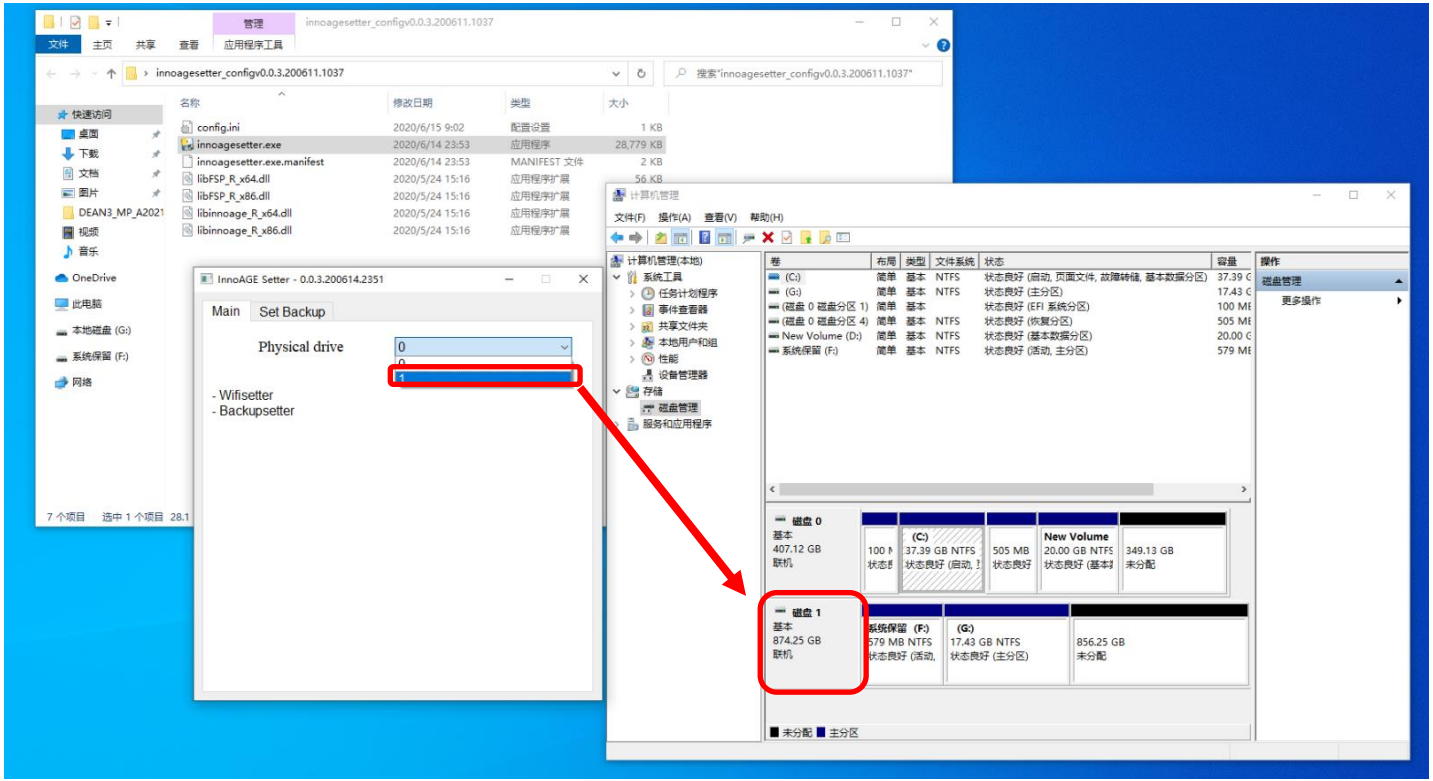
1. Connect host system and triggering cable to our InnoOSR Disk

安裝OS



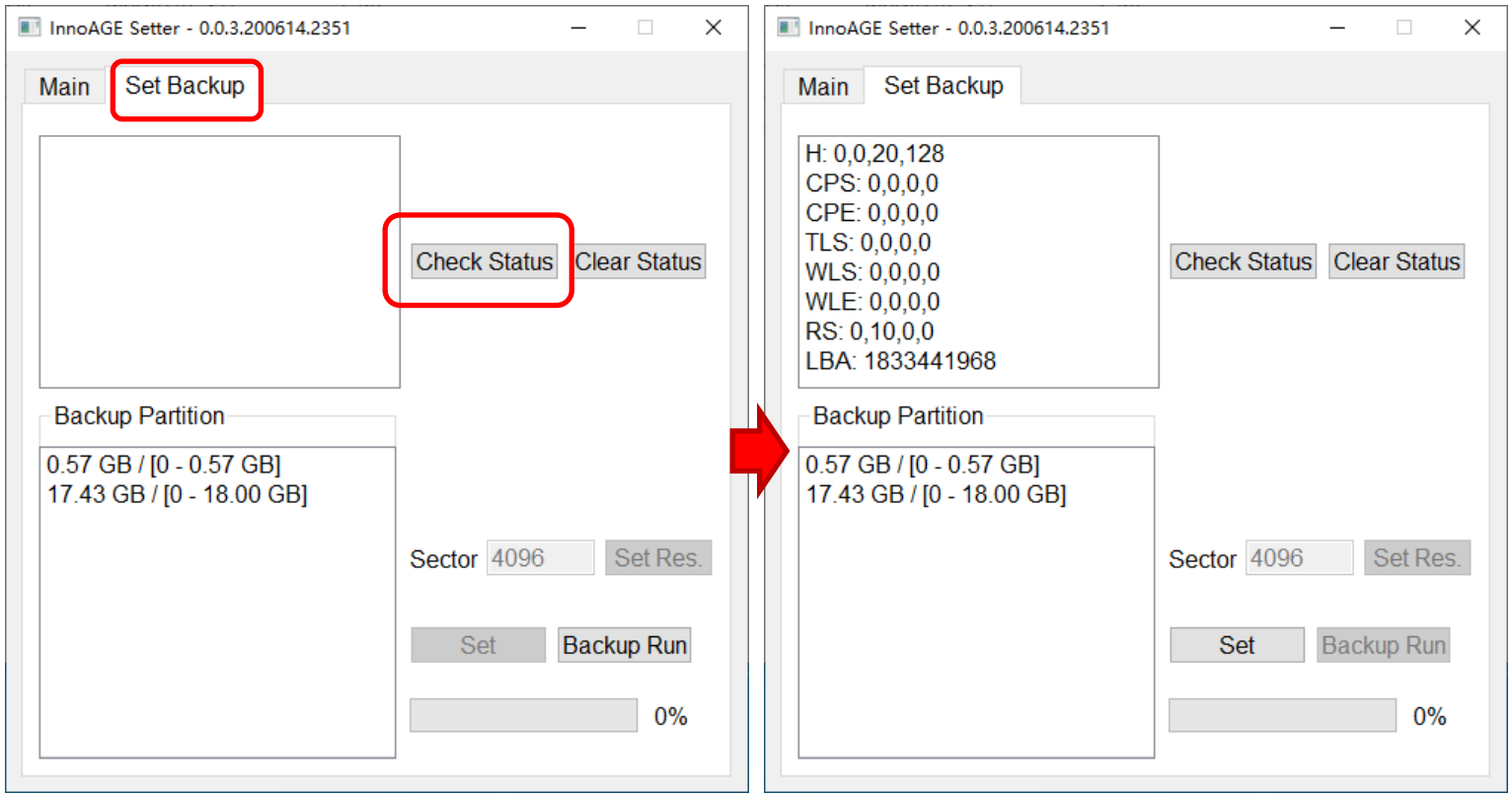
1. Install OS into our InnoOSR drive with partition smaller than hidden area

Backup OS



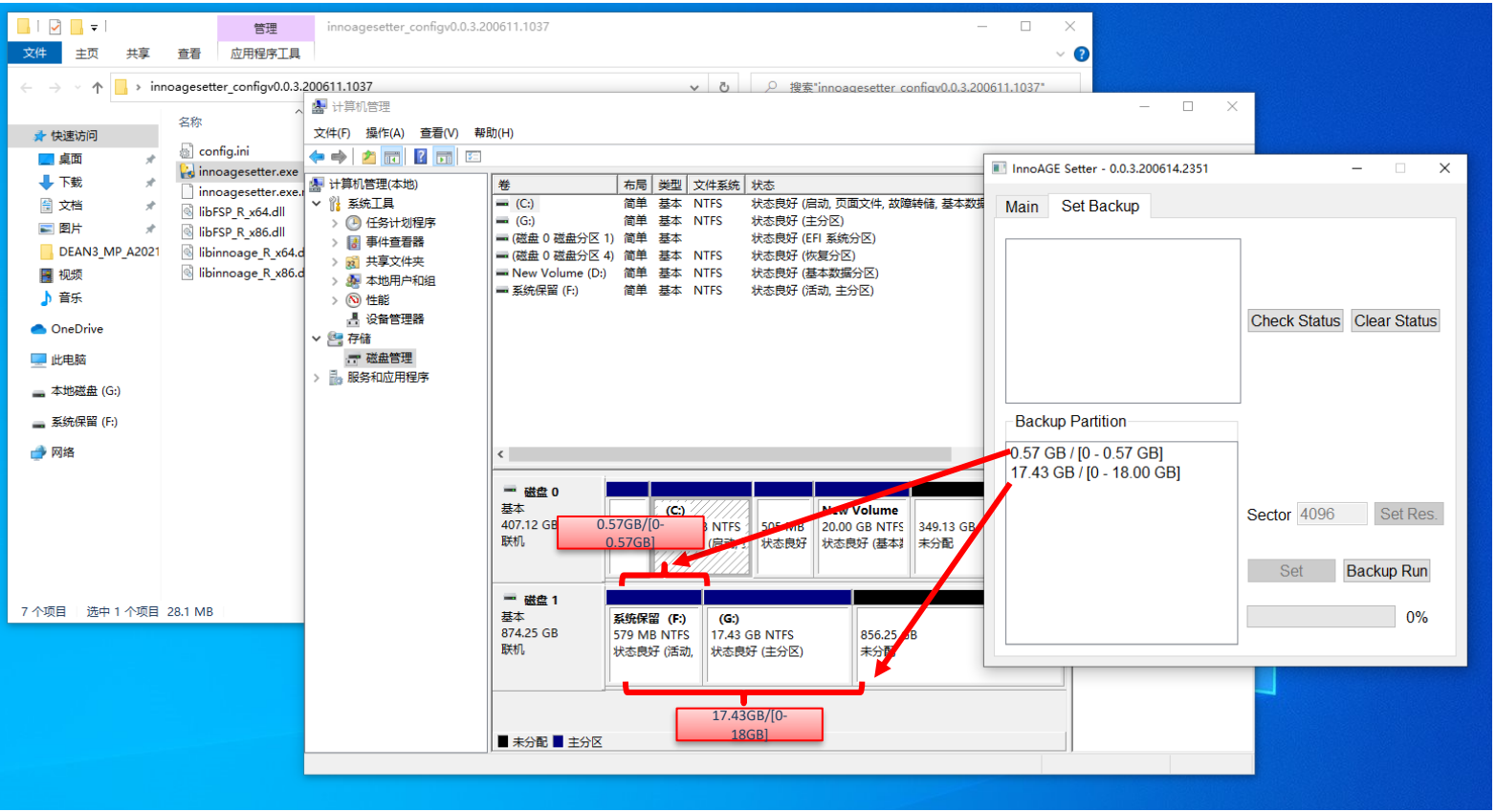
1. Start OSRtool
2. Choose InnoOSR SSD in physical drives list

Backup OS



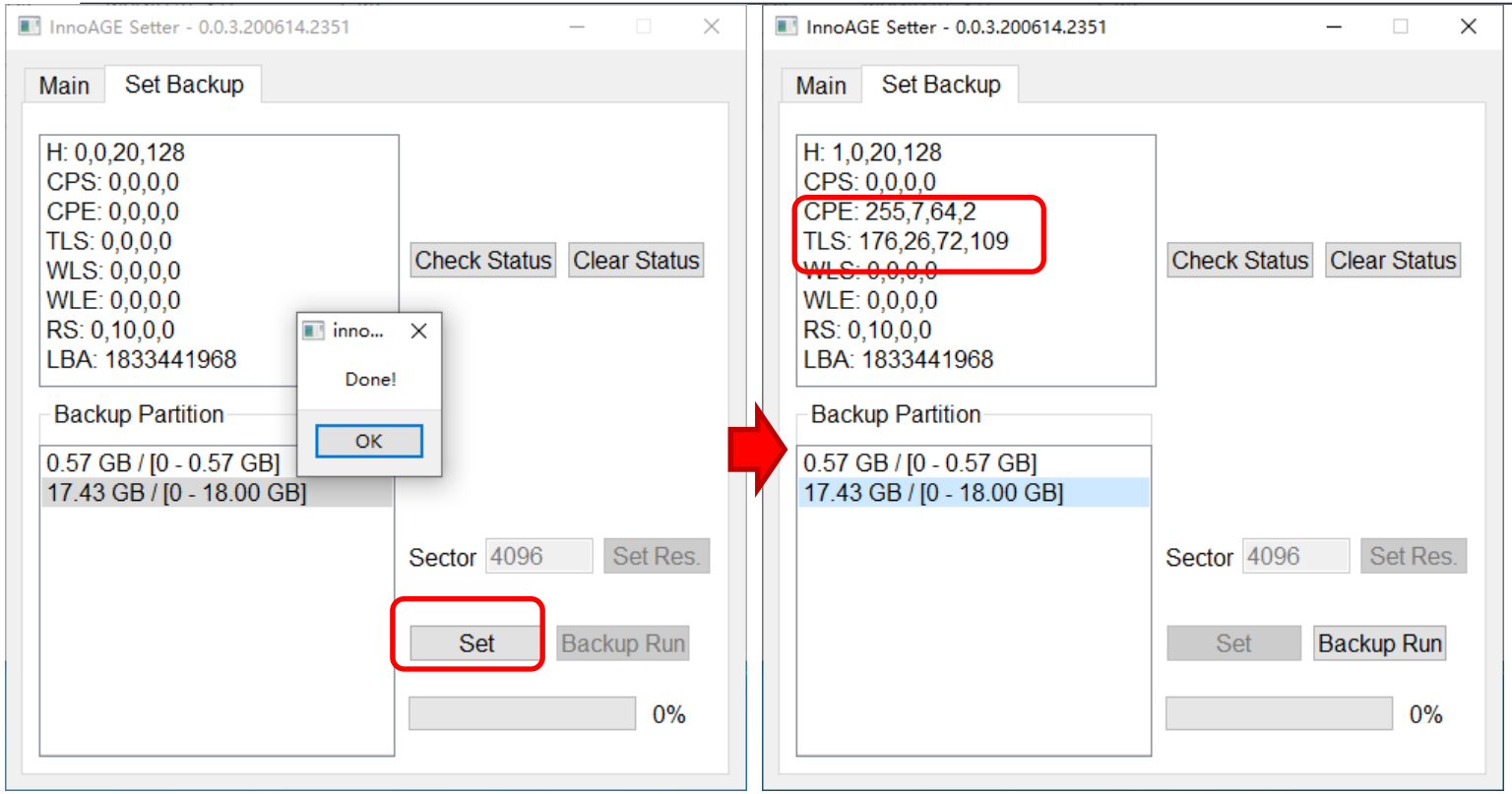
1. Switch to “Set Backup” page and click on “Check Status” to confirm hidden area status

Backup OS



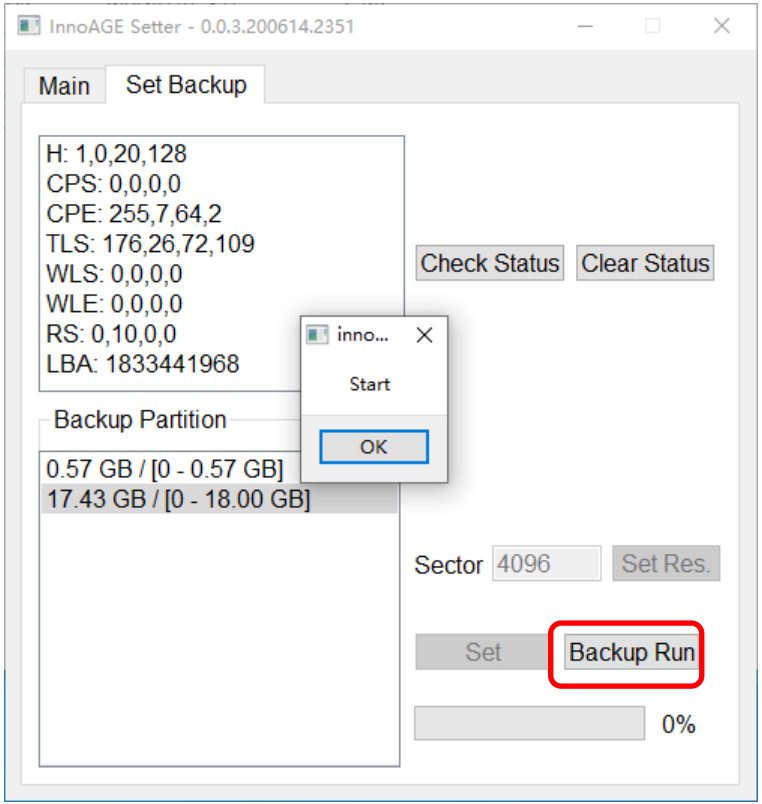
1. User double confirm back up partition

Backup OS



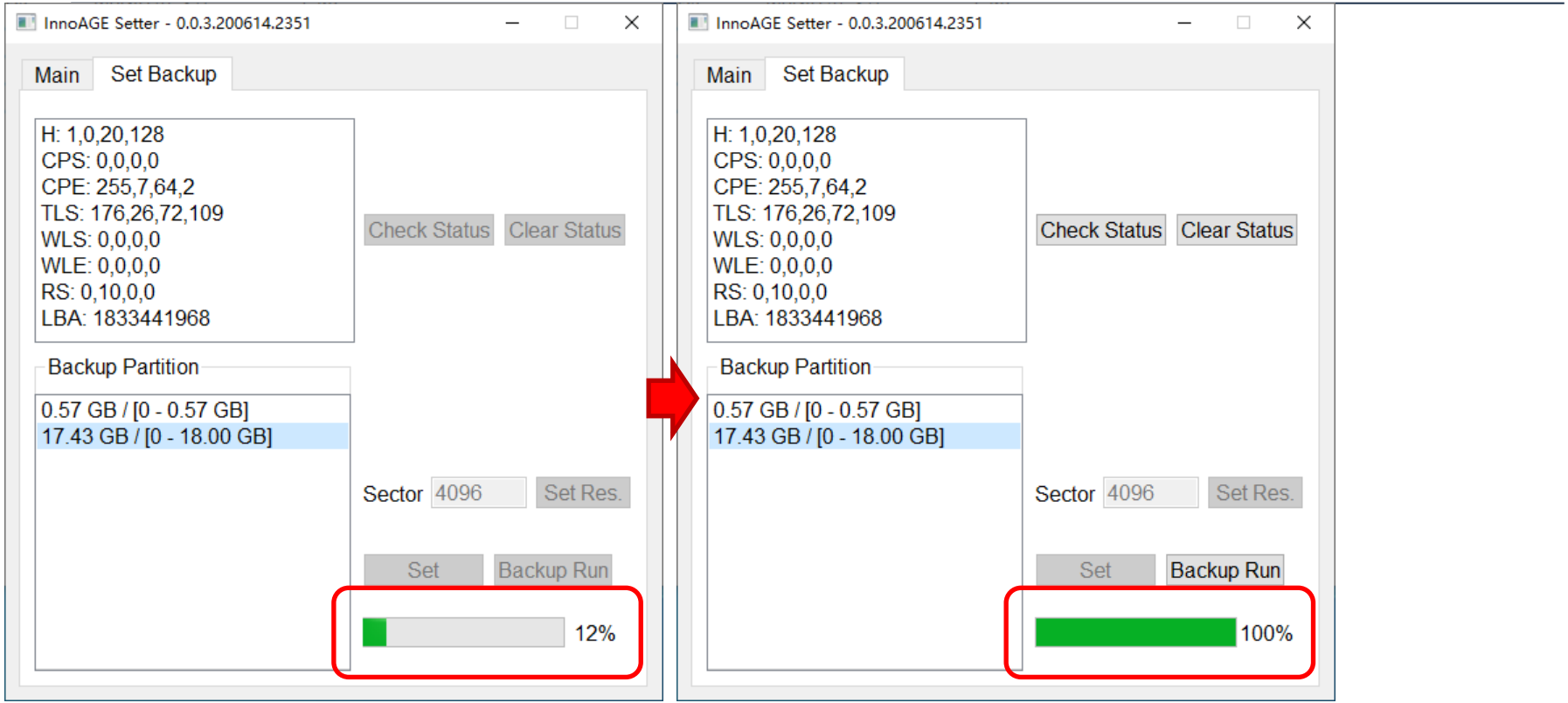
1. In current design, user can choose where the back up ends. The back up must start from first LBA
2. After "Set", value will show in "CPE" & "TLS". This mean target back-up area set

Backup OS



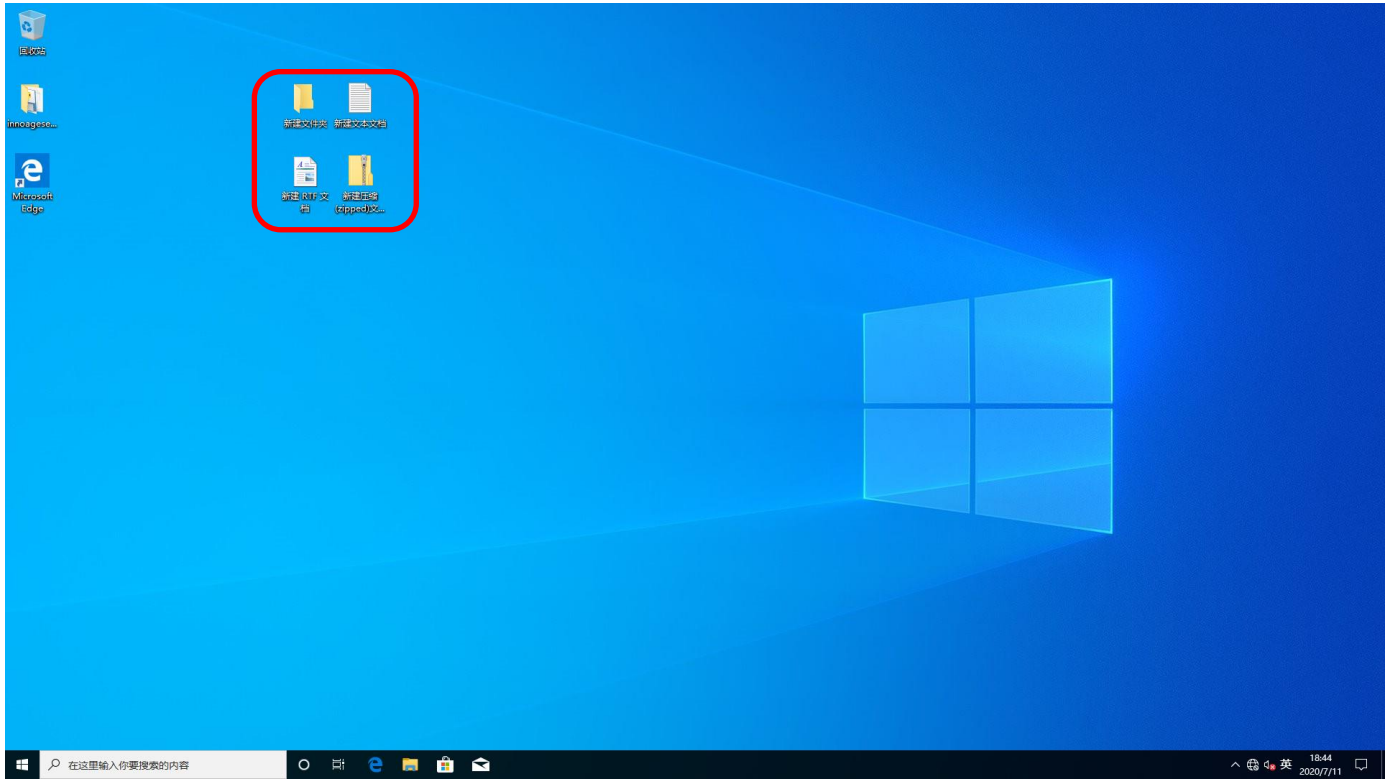
1. Click “Backup Run” to start back-up

Backup OS



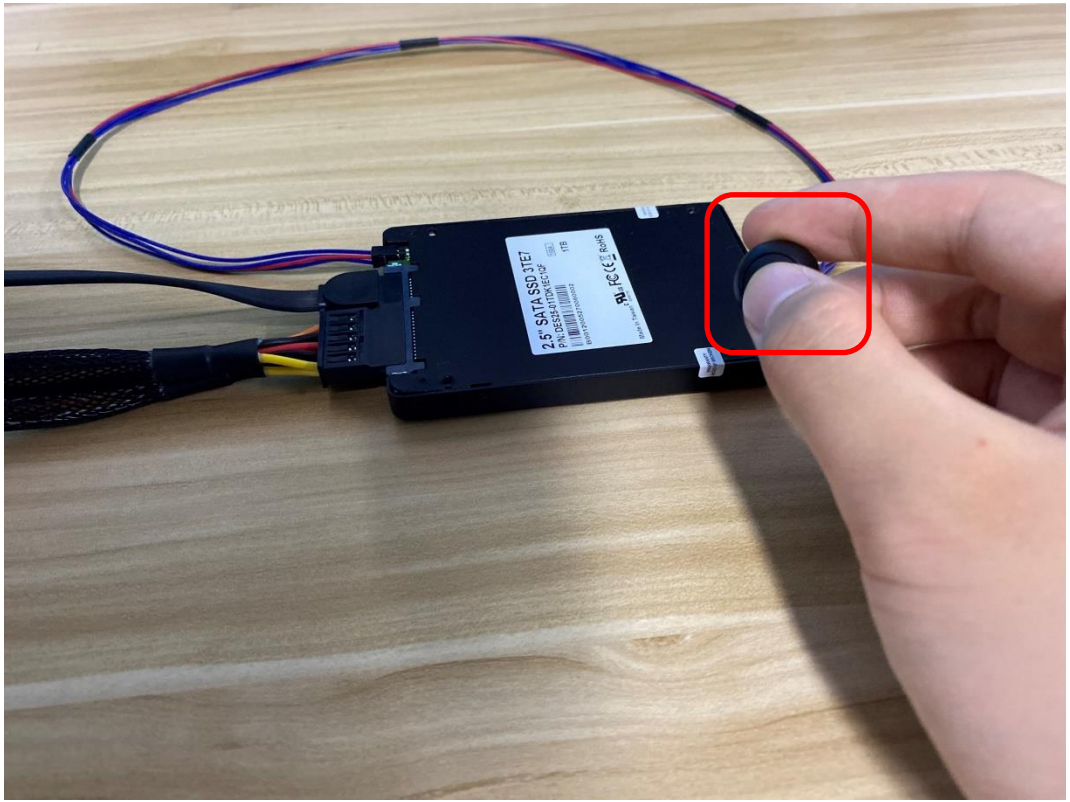
1. Wait until green progress bar reaches full

Recovery OS



1. Enter InnoOSR OS and create documents on desktop

Recovery OS



1. After pushing recovery for 5 seconds, recovery will start and LED starts blinking

Recovery OS

1. When LED stays lit, recovery process is finished

2. After recovery complete, reboot system

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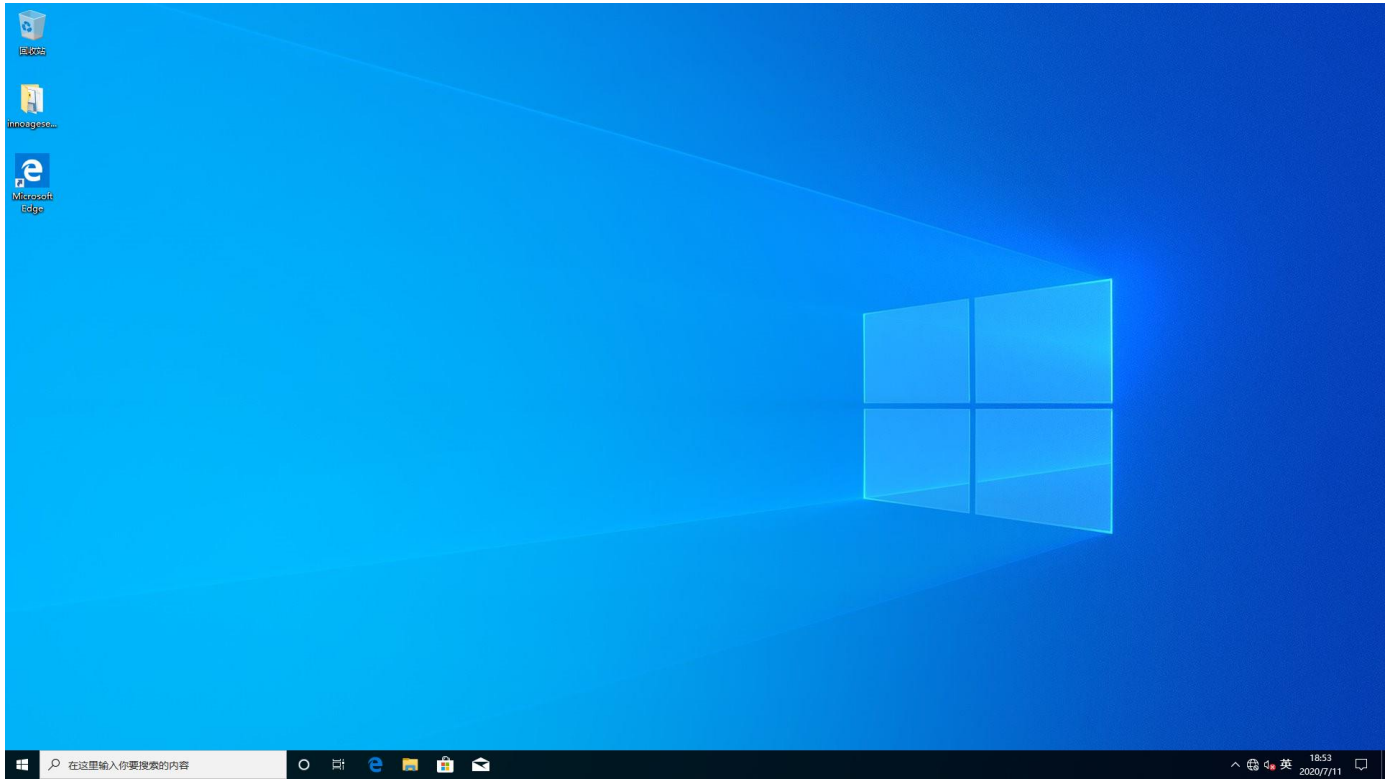
Recovery OS



1. OS returns to the previous status

Innodisk Corporation

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