**Reneal 2021C Box and Project Notes**

**Version 2**

School Key

School #1: Oljoro SS

School #2: Lengijave SS

School #3: Oldemedeye SS

School #4: Engutoto SS

School #5: Irkisongo SS

School #6: Kikwe SS

School #7: Abeid Amani SS

Miscellaneous Notes

1. Because the boxes will be sent stacked on wooden pallets, we have packed them with less bubble-wrap inside since the boxes will not be moving around during shipping. That way we also could fit in more equipment. But it also means that it will be good to handle these boxes more carefully. There is a label on each box that says “THIS SIDE UP”. Whenever you are moving the boxes in a vehicle or storing the boxes, please try to place the boxes so that the “THIS SIDE UP” label is on top facing up.
2. Our donor organization, Apto Solutions, is very focused on saving the environment. So we ask that Reneal Team Tanzania collect any laptops, laptop adapters, or other equipment donated by Apto that fails, so we can return it to the US for recycling. Our idea is that Neal and I can carry it back to the US in boxes. So when a school returns dead equipment to you from Apto Solutions, please store it in a box at RO for us.

Summary of Box Contents

1. There are Team supplies in three of the boxes.
   1. Box GG: There is a box of supplies that has a bag for each Team member with blue tape, pens, and some tools. There is a bag for a new Team member – Erick, can you please hold that for now? The box also includes RJ45s and zip ties for the seven new schools. There are security stickers to put on all of the laptops already in the schools. The replacement lamp for the Enyoito projector is also in the Team box. There is another USB hard drive with the most recent software on it. Erick – please hold that for now.
   2. Box P: This box includes two ruggedized laptops for Team use (2 Getacs). There are also adapters for these laptops (the Getac laptops use Toshiba adapters). Neal has put the server software on each of these laptops, so it is something that Team members can carry to a school to use as a server or use for testing and learning at the RO. These laptops are for any member of the Team to use, but please store it in a secure place and return it to storage when you are finished using it.
   3. Box DD: This box includes a third ruggedized laptop for Team use (1 Dell). The adapter for this ruggedized laptop is in box P.
2. Here is the basic organization of the boxes:
   1. Boxes A-N have laptops, adapters, mice, a keyboard, and the sys admin manual for each of the 7 schools. The sys admin manual is in the box with the mice. There are ten laptops in each box, and there are two boxes per schools (total of 14 boxes).
   2. Box O has four video projectors/cables/lamps and 10 spare Dell adapters.
   3. Box P has spare laptops and adapters, spare keyboards, spare mice, and two Team laptops and adapters.
   4. Boxes AA, BB, CC, and DD have the servers, server power cables, donation letters, and network switches for the seven new schools and a new server and power cable for Mwandet O-Level. One of the Team laptops is also in Box DD.
   5. Boxes EE and FF each contain 4 monitors, monitor stands, VGA cables, and power cables. Seven of these monitors are for spares, and 1 is for a new school.
   6. Boxes GG and HH contain monitors, monitor stands, VGA and DVI cables, and power cables for 6 of the new schools plus the new Mwandet server. Team supplies are in Box GG. The new disks for Longido A-Level and the old Mwandet O-Level server are also in Box GG. Some spare keyboards are in Box GG.
   7. There are some magazines for the Mlangarini SS library in Box O.
3. The following boxes have all of the equipment for the seven new schools: A, B, C, D, E, F, G, H, I, J, K, L, M, N, AA, BB, CC, DD, EE, GG, HH.
   1. Oljoro Secondary School (School #1): A, B, part of AA, part of GG, part of HH
   2. Lengijave Secondary School (School #2): C, D, part of AA, part of GG, part of HH
   3. Oldemedeye Secondary School (School #3): E, F, part of BB, part of EE
   4. Engutoto Secondary School (School #4): G, H, part of BB, part of GG, part of HH
   5. Irkisongo Secondary School (School #5): I, J, part of CC, part of HH
   6. Kikwe Secondary School (School #6): K, L, part of CC, part of HH
   7. Abeid Amani Secondary School (School #7): M, N, part of DD, part of HH

1. The monitors are somewhat confusing. After after I had packed all of the monitors, we found out that some of the servers can only use DVI and not VGA. So here is where the monitor parts are for the 8 servers (7 new schools and the new Mwandet O-level server):

*Oljoro SS (School #1): Needs DVI*

Monitor screen – Box GG, Monitor A

Monitor stand (2 pieces) – Box HH, Monitor A

DVI cable – Box GG

Power cable – Box HH

*Lengijave SS (School #2): Needs DVI*

Monitor screen – Box GG, Monitor B

Monitor stand (2 pieces) – Box HH, Monitor B

DVI cable – Box GG

Power cable – Box HH

*New Mwandet O-Level server: Needs DVI*

Monitor screen – Box GG, Monitor C

Monitor stand (2 pieces) – Box HH, Monitor C

DVI cable – Box GG

Power cable – Box HH

*Oldemedeye SS (School #3): Uses VGA*

Monitor screen – Box EE, Monitor H

Monitor stand (2 pieces) – Box EE, Monitor H

VGA cable – Box EE

Power cable – Box EE

*Engutoto SS (School #4): Uses VGA*

Monitor screen – Box GG, Monitor D

Monitor stand (2 pieces) – Box HH, Monitor D

VGA cable – Box HH

Power cable – Box HH

*Irkisongo SS (School #5): Uses VGA*

Monitor screen – Box HH, Monitor E

Monitor stand (2 pieces) – Box HH, Monitor E

VGA cable – Box HH

Power cable – Box HH

*Kikwe SS (School #6): Uses VGA*

Monitor screen – Box HH, Monitor F

Monitor stand (2 pieces) – Box HH, Monitor F

VGA cable – Box HH

Power cable – Box HH

*Abeid Amani SS (School #7): Uses VGA*

Monitor screen – Box HH, Monitor G

Monitor stand (2 pieces) – Box HH, Monitor G

VGA cable – Box HH

Power cable – Box HH

BRING BACK THE OLD MONITOR AND CABLES FROM MWANDET O-LEVEL AND PLACE IN BOX EE (FOR SPARES)

PUT ANY EXTRA VGA AND POWER CABLES FROM BOX HH IN BOX EE (FOR SPARES)

Below is a summary:

Monitor A: School #1 [DVI]

Monitor B: School #2 [DVI]

Monitor C: Mwandet O-Level [DVI]

Monitor D: School #4 [VGA]

Monitor E: School #5 [VGA]

Monitor F: School #6 [VGA]

Monitor G: School #7 [VGA]

Monitor H: School #3 [VGA]

1. Here is a list of what you will need at each new school being installed: server, power cord for server, donation letters, keyboard, monitor screen, monitor stand (2 pieces), either a DVI cable (School #1 and School #2) or VGA cable (School #3, School #4, School #5, School #6, School #7), power cord for monitor, network switch and power cord, 20 laptops, 20 laptop adapters, 21 mice, UPS, voltage stabilizer, 5 extensions, 1 multiplug, Cat6 cable, RJ45 connectors, zip ties, tape, pens, cable clips, screws for mounting the switch, SysAdmin manual, hammer and drill. Please also take the power meter. Before you plug anything in, check the voltage to make sure it is around 220 volts and stable.
2. Box O, P, EE, FF, GG, HH have spare equipment for Arusha Region plus replacements for dead equipment at some of the schools.
   1. 7 monitor/stand (pieces)/VGA cable/power cable [plus 1, old monitor and cables from Mwandet O-level]
   2. 6 laptops and adapters (Kiranyi-3, Olmotonyi-1, Oldadai-1, Olturmet-1)
   3. 9 keyboards (Spares)
   4. 7 mice (Spares)
   5. 12 Dell laptop adapters (Kiranyi-1, Einoti-1, Spares-10)
3. Box DD includes two hard disks.
4. One is to replace the stolen backup disk for the Longido A-Level server. It can be installed, and then the backup program selection needs to be changed with a command.
5. One is to replace the dead main disk in the old Mwandet O-Level server. It has the new software on it. Before it is installed though, we will need to transfer the student and teacher files from the old Mwandet O-Level server to the new Mwandet O-Level server (in Box DD).
6. The new Mwandet O-Level server needs a monitor with a DVI connection, so please take Monitor C (screen in Box GG, stand-2 pieces and power cable in Box HH, DVI cable in Box GG) along with the new Mwandet O-Level server. Bring back the old Mwandet monitor, VGA cable, and power cable and put in Box EE with the other spare monitors.

The old Mwandet O-Level server (with the new main disk installed) can be used as an emergency server and should be stored with the Spares equipment.

1. Box O has 4 used Dell projectors. David has suggested that 1 goes to Einoti, and he will work to identify 2 other schools to receive them. The 4th projector can be used by the Reneal Team – please find some safe place to store it, and return it to that safe place when you are finished using it. The donors also donated 4 replacement bulbs, but they should not be needed for a while; please store the spare bulbs with the other Spares equipment.
2. Box O has some used magazines – please give to Mlangarini SS for their library so the students can enjoy them.
3. There is a new bulb for the Enyoito projector in the box of Team supplies in Box GG. Please replace the bulb as soon as possible and get the projector back to them.
4. The Team supplies box (in Box GG) has the security stickers. Please put a sticker on every laptop deployed in the schools, on the back of the laptop. (Note that MacBooks already have a security sticker, so they will not need one of these new stickers). Neal is also putting stickers on the covers of the server, so you and the Super Users can see immediately if someone has been inside. If you need to open up a server case, please put on a new security sticker when you are finished.

Arusha Purchases

|  |  |  |
| --- | --- | --- |
| **Item** | **To Buy** | **Destination** |
| Uninterruptible power supply (UPS) | 7 | All schools |
| Voltage stabilizer, 500VA | 7 | All schools |
| Power universal extensions (5 outlets) | 35 | 5 each for all schools |
| Multiplug (so 3 things can be plugged into UPS) | 7 | All schools |

PLEASE NOTE: I’m not sure how much Cat6 we have. We will plan to buy 3 boxes from Fatma’s shop. I think that will be enough, but please let me know if we need another box.

PLEASE NOTE: UPS should be charged for 12 hours before it is used the first time.

Installation Notes

1. Please use Erick’s checklist during installation to make sure all steps are completed and you gather all the needed information about the new school.
2. Before you plug anything in, check the computer room voltage with the power meter to make sure it is around 220 volts and stable.
3. Neal turned off the power supply switch on each server, so you will need to turn it on before you start the server.
4. Neal forgot to set the time zone to EAT, so you will need to do that on each server.
5. Since Neal has put stickers on the server, do not open it unless you experience problems.

If the server does not start properly, take off the cover and check the power connectors to the motherboard, the hard disk and DVD connections, make sure the RAM is inserted fully, and check the network cards to make sure they are inserted completely.

1. The multi-plug should plug into the UPS. The server, network switch, and monitor will plug into the multi-plug.
2. I did not put white labels on the computers this time, but I have the specifications for all of the units in a spreadsheet. Please leave the blue tape with the number on the laptop, for identification. “AS” with a number means the laptop/adapter was donated by Apto Solutions.
3. There are donation letters for all 7 new schools – these are included in the box with each server. There are 2 copies of the donation letter for each school. Have each school head and main super user sign them. Please give them a copy, keep a copy for David, and post one at the Reneal github site.

Laptop Notes

All of the laptops for the 7 new schools in this shipment are Dell. All of the adapters should work with any laptop, so the adapters are not labeled with a number.

I changed a lot of CMOS batteries, but you may see some additional CMOS battery failures. For most of the models, it is very easy to replace the CMOS battery using a CR2032 battery, copper tape, and electrical tape. However there is one laptop, the Dell E6230, that had a dead CMOS but it is very difficult to replace. So the Super User should just do “F1” on boot, and do not try to change that CMOS battery.

**Complete List of Box Contents (sorted by school)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| A | Laptop | 10 | School #1 | Oljoro SS |
| A | Laptop adapter | 10 | School #1 | Oljoro SS |
| A | Mouse | 10 | School #1 | Oljoro SS |
| A | Reneal manual | 1 | School #1 | Oljoro SS |
| B | Laptop | 10 | School #1 | Oljoro SS |
| B | Laptop adapter | 10 | School #1 | Oljoro SS |
| B | Mouse | 11 | School #1 | Oljoro SS |
| B | Keyboard | 1 | School #1 | Oljoro SS |
| AA | Desktop computer and cable | 1 | School #1 | Oljoro SS |
| AA | Network switch, 24-port | 1 | School #1 | Oljoro SS |
| HH | Monitor stand (2 pieces) | 1 | School #1 | Oljoro SS |
| HH | Power cable | 1 | School #1 | Oljoro SS |
| GG | DVI cable | 1 | School #1 | Oljoro SS |
| GG | Monitor screen | 1 | School #1 | Oljoro SS |
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| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| AA | Desktop computer and cable | 1 | School #2 | Lengijave SS |
| AA | Network switch, 24-port | 1 | School #2 | Lengijave SS |
| C | Laptop | 10 | School #2 | Lengijave SS |
| C | Laptop adapter | 10 | School #2 | Lengijave SS |
| C | Mouse | 10 | School #2 | Lengijave SS |
| C | Reneal manual | 1 | School #2 | Lengijave SS |
| D | Laptop | 10 | School #2 | Lengijave SS |
| D | Laptop adapter | 10 | School #2 | Lengijave SS |
| D | Mouse | 11 | School #2 | Lengijave SS |
| D | Keyboard | 1 | School #2 | Lengijave SS |
| GG | DVI cable | 1 | School #2 | Lengijave SS |
| GG | Monitor screen | 1 | School #2 | Lengijave SS |
| HH | Monitor stand (2 pieces) | 1 | School #2 | Lengijave SS |
| HH | Power cable | 1 | School #2 | Lengijave SS |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| BB | Desktop computer and cable | 1 | School #3 | Oldemedeye SS |
| BB | Network switch, 24-port | 1 | School #3 | Oldemedeye SS |
| E | Laptop | 10 | School #3 | Oldemedeye SS |
| E | Laptop adapter | 10 | School #3 | Oldemedeye SS |
| E | Mouse | 10 | School #3 | Oldemedeye SS |
| E | Reneal manual | 1 | School #3 | Oldemedeye SS |
| EE | Monitor screen | 1 | School #3 | Oldemedeye SS |
| EE | Monitor stand (2 pieces) | 1 | School #3 | Oldemedeye SS |
| EE | VGA cable | 1 | School #3 | Oldemedeye SS |
| EE | Power cable | 1 | School #3 | Oldemedeye SS |
| F | Laptop | 10 | School #3 | Oldemedeye SS |
| F | Laptop adapter | 10 | School #3 | Oldemedeye SS |
| F | Mouse | 11 | School #3 | Oldemedeye SS |
| F | Keyboard | 1 | School #3 | Oldemedeye SS |
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| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| BB | Desktop computer and cable | 1 | School #4 | Engutoto SS |
| BB | Network switch, 24-port | 1 | School #4 | Engutoto SS |
| G | Laptop | 10 | School #4 | Engutoto SS |
| G | Laptop adapter | 10 | School #4 | Engutoto SS |
| G | Mouse | 10 | School #4 | Engutoto SS |
| G | Reneal manual | 1 | School #4 | Engutoto SS |
| GG | Monitor screen | 1 | School #4 | Engutoto SS |
| H | Laptop | 10 | School #4 | Engutoto SS |
| H | Laptop adapter | 10 | School #4 | Engutoto SS |
| H | Mouse | 11 | School #4 | Engutoto SS |
| H | Keyboard | 1 | School #4 | Engutoto SS |
| HH | Monitor stand (2 pieces) | 1 | School #4 | Engutoto SS |
| HH | Power cable | 1 | School #4 | Engutoto SS |
| HH | VGA cable | 1 | School #4 | Engutoto SS |
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| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| CC | Desktop computer and cable | 1 | School #5 | Irkisongo SS |
| CC | Network switch, 24-port | 1 | School #5 | Irkisongo SS |
| HH | Monitor stand (2 pieces) | 1 | School #5 | Irkisongo SS |
| HH | Power cable | 1 | School #5 | Irkisongo SS |
| HH | VGA cable | 1 | School #5 | Irkisongo SS |
| HH | Monitor screen | 1 | School #5 | Irkisongo SS |
| I | Laptop | 10 | School #5 | Irkisongo SS |
| I | Laptop adapter | 10 | School #5 | Irkisongo SS |
| I | Mouse | 10 | School #5 | Irkisongo SS |
| I | Reneal manual | 1 | School #5 | Irkisongo SS |
| J | Laptop | 10 | School #5 | Irkisongo SS |
| J | Laptop adapter | 10 | School #5 | Irkisongo SS |
| J | Mouse | 11 | School #5 | Irkisongo SS |
| J | Keyboard | 1 | School #5 | Irkisongo SS |
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| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| CC | Desktop computer and cable | 1 | School #6 | Kikwe SS |
| CC | Network switch, 24-port | 1 | School #6 | Kikwe SS |
| HH | Monitor stand (2 pieces) | 1 | School #6 | Kikwe SS |
| HH | Power cable | 1 | School #6 | Kikwe SS |
| HH | VGA cable | 1 | School #6 | Kikwe SS |
| HH | Monitor screen | 1 | School #6 | Kikwe SS |
| K | Laptop | 10 | School #6 | Kikwe SS |
| K | Laptop adapter | 10 | School #6 | Kikwe SS |
| K | Mouse | 10 | School #6 | Kikwe SS |
| K | Reneal manual | 1 | School #6 | Kikwe SS |
| L | Laptop | 10 | School #6 | Kikwe SS |
| L | Laptop adapter | 10 | School #6 | Kikwe SS |
| L | Mouse | 11 | School #6 | Kikwe SS |
| L | Keyboard | 1 | School #6 | Kikwe SS |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| DD | Desktop computer and cable | 1 | School #7 | Abeid Amani SS |
| DD | Network switch, 24-port | 1 | School #7 | Abeid Amani SS |
| HH | Monitor stand (2 pieces) | 1 | School #7 | Abeid Amani SS |
| HH | Power cable | 1 | School #7 | Abeid Amani SS |
| HH | VGA cable | 1 | School #7 | Abeid Amani SS |
| HH | Monitor screen | 1 | School #7 | Abeid Amani SS |
| M | Laptop | 10 | School #7 | Abeid Amani SS |
| M | Laptop adapter | 10 | School #7 | Abeid Amani SS |
| M | Mouse | 10 | School #7 | Abeid Amani SS |
| M | Reneal manual | 1 | School #7 | Abeid Amani SS |
| N | Laptop | 10 | School #7 | Abeid Amani SS |
| N | Laptop adapter | 10 | School #7 | Abeid Amani SS |
| N | Mouse | 11 | School #7 | Abeid Amani SS |
| N | Keyboard | 1 | School #7 | Abeid Amani SS |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| GG | Replacement hard disks | 1 | Longido A-Level | Longido A-Level |
|  |  |  |  |  |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| O | Magazines | about 10 | Mlangarini | Mlangarini |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| DD | Desktop computer and cable | 1 | Mwandet O-Level | Mwandet O-Level |
| GG | DVI cable | 1 | Mwandet O-Level | Mwandet O-Level |
| GG | Monitor screen | 1 | Mwandet O-Level | Mwandet O-Level |
| HH | Monitor stand (2 pieces) | 1 | Mwandet O-Level | Mwandet O-Level |
| HH | Power cable | 1 | Mwandet O-Level | Mwandet O-Level |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| GG | Replacement main disk | 1 | Mwandet O-Level (old server) | Put in spares after disk is installed |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| DD | Laptop (ruggedized) | 1 | Reneal Team | Reneal Team |
| GG | Team supplies | 1 box | Reneal Team | Reneal Team |
| O | Used projector and lamp | 1 | Reneal Team | Reneal Team |
| P | Laptop (ruggedized) | 2 | Reneal Team | Reneal Team |
| P | Laptop adapter (ruggedized) | 3 | Reneal Team | Reneal Team |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| O | Used projector and lamp | 1 | School to be determined | School to be determined |
| O | Used projector and lamp | 1 | School to be determined | School to be determined |
| O | Used projector and lamp | 1 | Einoti | Einoti |
|  |  |  |  |  |
| **Box** | **Item** | **Quantity** | **Destination** | **Destination Name** |
| EE | Monitor screen | 3 | Spares | Spares |
| EE | Monitor stand (2 pieces) | 3 | Spares | Spares |
| EE | VGA cable | 3 | Spares | Spares |
| EE | Power cable | 3 | Spares | Spares |
| FF | Monitor screen | 4 | Spares | Spares |
| FF | Monitor stand (2 pieces) | 4 | Spares | Spares |
| FF | VGA cable | 4 | Spares | Spares |
| FF | Power cable | 4 | Spares | Spares |
| GG | Used keyboards | 3 | Spares | Spares |
| HH | VGA cable | 3 | Spares | Spares |
| O | Dell laptop adapters | 10 | Spares | Spares |
| P | Keyboards | 6 | Spares | Spares |
| P | Mouse | 7 | Spares | Spares |
| P | Laptop | 6 | Kiranyi-3, Olmotonyi-1, Oldadai-1, Olturmet-1 | Kiranyi-3, Olmotonyi-1, Oldadai-1, Olturmet-1 |
| P | Laptop adapter | 6 | Kiranyi-3, Olmotonyi-1, Oldadai-1, Olturmet-1 | Kiranyi-3, Olmotonyi-1, Oldadai-1, Olturmet-1 |
| P | Laptop adapter | 1 | Einoti (replacement) | Einoti |
| P | Laptop adapter | 1 | Kiranyi (replacement) | Kiranyi |