# Computer Refresh

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IT Chair

# Purpose

Requesting approval to purchase 8 new computers to

1. Replace old hardware
   a. Critical machines nearing end of useful life
   b. Underpowered machines for running all of the software we've purchased
2. Improve our offerings
   a. Add computers for requested areas
      i. Cosplay
      ii. Electronics
      iii. Purcellville Green Room
   b. Add features that have been requested by members
      i. 3D scanning, modeling and photogrammetry
      ii. Video production

# Purpose

Requesting approval to purchase 8 new computers

1. Replace old hardware at risk of failure
    a. Leesburg
        i. 3D Printing at MSL
        ii. Laser Cutter at MSL
        iii. Classroom
        iv. UV or Sublimation
        v. Big Red or Metalworking  (Brad want's Fusion 360 for one of those rooms.)
    b. Purcellville:
        i. Green Room
2. Add new locations
    a. Leesburg
        i. Cosplay
        ii. Electronics
        iii. Printmaking
    b. Purcellville
        i. 3D Printing at MS-P

# Old Hardware

These PCs are essential to Makersmiths offerings, but are older hardware facing an increased risk of failure.
No spares on hand to replace so failure will prevent use of the tools attached

- Laser Cutter
    - Dell XPS 8500
    - Donated by Beverly Murdock
    - Mfg Date: 12/07/2012
- 3D Printing/Classroom
    - Lenovo 501S-08ISH
    - On Loan from Mike Fistler
    - Mfg Date 08/2016

# Limited Accessibility Impacting Space Use

- Electronics Room at Leesburg
  - No computers currently
  - Difficult to work in electronics without access to Internet for circuit designs and code for PIs/Arduinos
- 3D Printing
  - Leesburg
    - Single computer makes classes take longer
    - Conflicts when multiple members want to print
  - Purcellville
    - No dedicated computer
- Green Room at Purcellville
  - Only 1 computer in the Green Room
    - Complaints about conflicts between 3D Printer users and Woodshop users
  - No computer in LB classroom

# Solutions

## Dell XPS 8960- For compute intensive programs

- Windows 11 Pro
- 13th Gen Intel® Core™ i7-13700
- NVIDIA® GeForce RTX™ 4070, 12 GB GDDR6X
- RAM: 32GB upgradable to 64GB
- 1 TB, M.2, PCIe NVMe, SSD (boot) + 2 TB, 7200 RPM, SATA, HDD (storage)
- https://www.dell.com/en-us/shop/desktop-computers/xps-desktop/spd/xps-8960-desktop/usextpbts8960gmxn

## Dell Inspiron 3020

- Windows 11 Pro
- 13th Gen Intel® Core™ i7-13700
- NVIDIA® GeForce RTX™ 3050, 8 GB GDDR6
- RAM: 16GB upgradable to 64GB
- 1 TB, M.2, PCIe NVMe, SSD
- https://www.dell.com/en-us/shop/desktop-computers/inspiron-desktop/spd/inspiron-3020-desktop/useitpbts3020gsds

# Solutions

Dell 27 Monitor - S2721HS

- 27”
- Full HD
- https://www.dell.com/en-us/shop/cty/apd/210-axjz

# Placement

## Dell XPS 8960

- Classroom
- UV Printer
- 3D Printing
- Green Room

## Dell Inspiron 3020

- Green Room
- Big Red/Metal Shop
- 3D Printing
- Printmaking

## Existing Dell Computers

- Cosplay
- Electronics
- LB Classroom

# Cost

| Computer | Price (incl tax) | Qty | Total |
| --- | --- | --- | --- |
| Dell XPS | $1,866 | 4 | $7,464 |
| Dell Inspiron | $1,017 | 4 | $4,068 |
| Dell Monitor - S2721HS | $158 | 4 | $632 |
| | | | $12,164 |