

Esports



FENWORKS

System & Networking
Guide

The Backbone of High-Tech Activities

Contained within this guide is an exhaustive list of titles that may be installed in an esports lab on your campus depending on varsity & club offerings.

In addition to the accept listing below, **the program director needs local admin to all esports computers due to the constant updates these programs receive and the rigorous practice & competition schedule.** The inability to update several titles each match day will result in forfeitures impacting program & student success

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PC Program Categories:

- Driver
- Client
- Utility
- Game

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Chipset Driver (AMD or Intel)

Category: Driver

Links:

AMD: https://drivers.amd.com/drivers/installer/20.50/beta/radeon-software-adrenalin-2020-21.3.1-minimalsetup-210317_web.exe

Intel: <https://www.intel.com/content/www/us/en/support/detect.html>

Explanation: Drivers that allow the motherboard and computer processor to stay up to date and functioning.

Accept list: N/A

GPU Driver (AMD or Nvidia)

Category: Driver

Link:

AMD: https://drivers.amd.com/drivers/installer/20.50/beta/radeon-software-adrenalin-2020-21.3.1-minimalsetup-210317_web.exe

Nvidia: <https://www.nvidia.com/en-us/geforce/drivers/>

Explanation: Drivers that allow the graphics card to stay up to date and functioning.

Accept list: N/A

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Discord

Category: Utility

Link: <https://discord.com/api/download?platform=win>

Explanation: Program that allows students and coaches to communicate with each other and other teams. Necessary for club communication, tournaments (administration, registration, participation, etc.), leagues (administration, registration, participation, etc.), and college recruitment.

Accept list: N/A

Streamlabs

Category: Utility

Link: <https://streamlabs.com/slobs/download>

Explanation: Program allowing lab computers to stream events and matches to Twitch.tv

Accept list: N/A

Gif Your Game

Category: Utility

Link: <https://www.gifyourgame.com/>

Explanation: Utility that allows players to capture moments from their competitive matches that can later be uploaded to the team website and social media.

Accept list: N/A



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Epic Pen

Category: Utility

Link: <https://epic-pen.com/download>

Explanation: Utility that allows coaches and players to write on screen over various applications for review and discussion.

Accept list: N/A

Steam

Category: Utility

Link: <https://cdn.akamai.steamstatic.com/client/installer/SteamSetup.exe>

Explanation: Hub for several competitive titles such as Rocket League, Marvel Rivals, Apex Legends, Smite, and Counter-Strike: Global Offensive that allows them to be downloaded and played.

Accept list:

HTTP	TCP port 80	
HTTPS	443	
UDP	27015 through 27030 4380	
TCP	27015 through 27030	
UDP	27000 to 27015	inclusive (Game client traffic)
UDP	27015 to 27030	inclusive (Typically Matchmaking and HLTV)

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UDP	27031 and 27036	(incoming, for In-Home Streaming)
TCP	27036 and 27037	(incoming, for In-Home Streaming)
TCP	27015	(SRCDS Rcon port)
UDP	3478 4379 4380	(Outbound)
IPV4	45.121.184.0/23 45.121.186.0/23 103.10.124.0/24 103.10.125.0/24 103.28.54.0/23 146.66.152.0/23 146.66.154.0/24 146.66.155.0/24 146.66.156.0/23 146.66.158.0/23	Valve Corporation
IPV4	153.254.86.0/24	
IPV4	155.133.224.0/23 155.133.227.0/24 155.133.228.0/23 155.133.230.0/23 155.133.232.0/24 155.133.233.0/24 155.133.234.0/24 155.133.235.0/24 155.133.236.0/23 155.133.238.0/24 155.133.239.0/24 155.133.240.0/23 155.133.242.0/23 155.133.244.0/24	Valve Corporation

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	155.133.245.0/24 155.133.246.0/23 155.133.248.0/24 155.133.249.0/24 155.133.250.0/24 155.133.252.0/24 155.133.253.0/24 155.133.254.0/24 155.133.255.0/24 162.254.192.0/24 162.254.193.0/24 162.254.194.0/23 162.254.196.0/24 162.254.197.0/24 162.254.198.0/24 162.254.199.0/24 185.25.180.0/23 185.25.182.0/24 185.25.183.0/24 190.216.121.0/24 190.217.33.0/24 192.69.96.0/23	
IPV4	205.185.194.0/24	Valve Corporation (C04780190)
IPV4	205.196.6.0/24 208.64.200.0/24 208.64.201.0/24 208.64.202.0/24 208.64.203.0/24 208.78.164.0/23 208.78.166.0/24 208.78.167.0/24	Valve Corporation



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Nintendo Switch Online

Having issues with your school's internet filter?

- Try placing your Nintendo Switch™ [into a DMZ](#).
- For the list of Nintendo ports to open (whitelist), [follow the steps found in this article](#).
- Still experiencing issues? Here's some advice for troubleshooting issues related to [NAT and/or Peer to Peer Connections](#)

If you still have concerns, try searching Nintendo's Customer Support [website](#).

Link: <https://www.nintendo.com/switch/online-service/>

Additional Guide: <https://k12techpro.com/how-to-change-nintendo-switch-nat-type-for-esports-fortigate/>

Explanation: The network service used for Nintendo Switch online multiplayer functionality to download, update, and play club titles such as Super Smash Bros. Ultimate, Rocket League, and Fortnite.

accept list:

UDP	1-65535	(inclusive)
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Super Smash Bros. Ultimate

Explanation: Nintendo Switch exclusive game that is played both in-person and online in multiple leagues and tournaments including those in Fenworks.

Accept list:

TCP	6667 12400 28910 29900 29901 29920	
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Minecraft Java Edition:

Category: Game

Link: <https://www.minecraft.net/en-us/download>

Explanation: A video game title played in the competitive league Fenworks alongside various state and national tournaments held by high schools, colleges, and national esports organizations.

Accept List:

Port:	25565
Whitelist:	Mnvl.scalacube.online, fenworkssd.scalacube.online, fenworksnd.scalacube.online, fenworkswy.scalacube.online

Marvel Rivals:

Category: Game

Link: https://store.steampowered.com/app/2767030/Marvel_Rivals/

Explanation: A video game title played in Fenworks alongside various state and national tournaments held by high schools, colleges, and national esports organizations.

General Troubleshooting Guide for Marvel Rivals: <https://turboboost.gg/article/marvel-rivals-error-common-problems-and-proven-fixes>

TCP Ports	3074, 80, 443, 8880-8881, 9000-9002, 10002-10005, 10200-10204,
UDP Ports	3074, 3075
IP Whitelist	8.221.58.108 23.205.110.197 69.173.151.100

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	162.159.130.234
	69.173.146.5
	162.159.130.234
	50.57.31.206
	142.250.138.95
	38.98.139.68
	142.250.114.95
	35.221.121.192
	142.250.113.95
	35.221.121.192
	142.250.113.95
	34.49.186.238
	13.107.5.91
	34.36.165.17
	104.36.113.34
	34.146.213.177
	104.18.21.94
	34.117.188.166
	104.18.14.62
	34.117.188.166
	34.110.138.217
	23.219.160.234
	23.219.160.229
	23.205.110.212
	23.205.110.210
	23.205.110.208
	23.205.110.204
	23.205.110.200

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Epic Games

Category: Client

Link: <https://launcher-public-service-prod06.ol.epicgames.com/launcher/api/installer/download/EpicGamesLauncherInstaller.msi>

Explanation: Client that gives access to the games Rocket League and Fortnite played in Fenworks and several other national tournaments.

Accept list:

IP	epicgames-download1.akamaized.net download.epicgames.com download2.epicgames.com download3.epicgames.com download4.epicgames.com epicgames.com lcdn1.unrealengine.com cdn2.unrealengine.com lstatic-assets-prod.epicgames.com lgraphql.epicgames.com account-public-service-prod03.ol.epicgames.com catalog-public-service-prod06.ol.epicgames.com coderedemption-public-service-prod.ol.epicgames.com datarouter.ol.epicgames.com datastorage-public-service-liveeos.ol.epicgames.com ecommerceintegration-public-service-ecomprod02.ol.epicgames.com entitlement-public-service-prod08.ol.epicgames.com eulatracking-public-service-prod06.ol.epicgames.com friends-public-service-prod06.ol.epicgames.com fulfillment-public-service-prod06.ol.epicgames.com launcher-public-service-prod06.ol.epicgames.com launcher-website-prod07.ol.epicgames.com/ launcherwaitingroom-public-service-prod06.ol.epicgames.com
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		library-service.live.us1a.on.epicgames.com lightswitch-public-service-prod06.ol.epicgames.com notifications-service-prod06.ol.epicgames.com:443 orderprocessor-public-service-ecomprod01.ol.epicgames.com persona-public-service-prod06.ol.epicgames.com priceengine-public-service-ecomprod01.ol.epicgames.com xmpp-service-prod.ol.epicgames.com
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Fortnite

Category: Game

Link: <https://www.epicgames.com/store/en-US/p/fortnite>

Explanation: A video game title played in Fenworks alongside various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

TCP	5222 5795-5847	(inclusive)
UDP	5222 5795-5847	(inclusive)

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Rocket League

Category: Game

Link: <https://www.epicgames.com/store/en-US/p/rocket-league>

Explanation: A video game title played in Fenworks alongside various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

UDP	7000-9000	rocketleague.com
TCP	80 443	rocketleague.com
IP		psyonix-rl.appspot.com rl-cdn.psyonix.com psyonix.com datahound.com c.evidon.com Psy.net rl-cdn.psyonix.com Config.psyonet.gg rl-psy.net

Bakkes Mod

Category: Utility

Link:

<https://github.com/bakkesmodorg/BakkesModInjectorCpp/releases/latest/download/BakkesModSetup.zip>

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Explanation: Extension to Rocket League that allows players to practice and run drills.

accept list: N/A

League of Legends

Category: Game

Link:

https://signup.na.leagueoflegends.com/en/signup/redownload?page_referrer=index

Explanation: A video game title played in Fenworks alongside various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

TCP	2099	prod.na2.lol.riotgames.com
TCP	5222-5223	chat.na2.lol.riotgames.com
UDP	5100-5400	192.64.170.0/24 192.64.171.0/24 192.64.172.0/24 192.64.173.0/24 192.64.174.0/24
TCP	8088	spectator.na2.lol.riotgames.com
TCP	443	auth.riotgames.com lq.na2.lol.riotgames.com l3cdn.riotgames.com prod.config.patcher.riotgames.com us.edge.rms.si.riotgames.com ekg.riotgames.com acs.leagueoflegends.com entitlements.auth.riotgames.com

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		matchhistory.na.leagueoflegends.com plstore.na2.lol.riotgames.com status.leagueoflegends.com store.na2.lol.riotgames.com lolstore-a.akamaihd.net lolesports.com riotgamespatcher-a.akamaihd.net cds.s4a8x2q3.hwcdn.net
TCP	80, 443	clubs.leagueoflegends.com frontpage.na.leagueoflegends.com lolstatic-a.akamaihd.net oembed.leagueoflegends.com am-a.akamaihd.net riot.com playvs.com
IP		playerpreferences.riotgames.com riotp0use1.vivox.com

Valorant

Category: Game

Link: <https://playvalorant.com/en-us/>

Explanation: A video game title played in Fenworks alongside various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

TCP	2099 5222-5223 8088 8393-8400	
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UDP	5000-5500 8088	
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Kernel level anti-cheat called Riot Vanguard needs to initialize on each system startup

Apex Legends

Category: Game

Link: https://store.steampowered.com/app/1172470/Apex_Legends/

Explanation: A video game title played in various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

TCP	1024-1124 3216 9960-9969 18000 18060 18120 27900 28910 29900 27015-27030 27036-27037	
UDP	4380 27000-27031 27036 1024-1124 18000 29900 37000-40000	

Smite

Category: Game

Link: <https://store.steampowered.com/app/386360/SMITE/>

Explanation: A video game title played in various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

UDP	9002-9999	smitegame.com
TCP	9000, 9001	hirezstudios.com
IP		hirez.net hi-rezgame.net

Counter-Strike: Global Offensive

Category: Game

Link:

https://store.steampowered.com/app/730/CounterStrike_Global_Offensive/

Explanation: A video game title played in various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

TCP	27015-27030 27036-27037	
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UDP	4380 27000-27031 27036	
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Faceit Anti-Cheat

Category: Utility

Link: <https://www.faceit.com/en/anti-cheat>

Explanation: Add on to Counter-Strike: Global Offensive that allows players to participate in the Faceit League and associated tournaments.

accept list: N/A

ESEA Client

Category: Client

Link: <https://play.esea.net/index.php?s=downloads&d=download&id=1>

Explanation: Client for Counter-Strike: Global Offensive that allows players to participate in the ESEA league and associated tournaments.

accept list: N/A

Skybox

Category: Utility

Link: <https://landing.skybox.gg/>

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Explanation: Tool used to upload match recordings and analyze them.

accept list: N/A

Battle.net

Category: Client

Link: <https://www.blizzard.com/apps/battle.net/desktop>

Explanation: Client that gives access to the games Overwatch and Hearthstone.

accept list:

TCP	80 443 1119 1120 3724 4000 6112 6113 6114	
UDP	80 443 1119 3478-3479 5060 5062 6250 12000-64000 1120 3724 4000 6112 6113 6114	

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Overwatch

Category: Game

Link: <https://playoverwatch.com/en-us/>

Explanation: A video game title played in Fenworks, and alongside various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

TCP	1119 3724 6113 80	
UDP	3478-3479 5060 5062 6250 12000-64000	

Hearthstone

Category: Game

Link: <https://playhearthstone.com/en-us>

Explanation: A video game title played in various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

TCP	1119 3724	
UDP	1119 3724	

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Ubisoft Connect

Category: Client

Link: <https://ubi.li/4vxt9>

Explanation: Client that gives access to the game Rainbow 6: Siege that is in the SPIN League and several tournaments nationally.

accept list:

TCP	80 443 13000 13005 13200 14000 14001 14008 14020 14021 14022 14023 14024	
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Rainbow 6: Siege

Category: Game

Link: <https://www.ubisoft.com/en-us/game/rainbow-six/siege/buy>

Explanation: A video game title played in various state and national tournaments held by high schools, colleges, and national esports organizations.

accept list:

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TCP	80 443 13000 13005 13200 14000 14001 14008 14020 14021 14022 14023 14024	
UDP	6015	

Xbox Live

Link: <https://www.xbox.com/en-US/live>

Explanation: The network used for online multiplayer functionality for Windows Store & Xbox titles. Necessary for titles like Forza, Rainbow 6, and Rocket League (if the latter 2 are played on Xbox).

accept list:

TCP	53 80 3074	
UDP	53 88 500 307 3544 4500	

Resources

- <https://drive.google.com/file/d/13ILVu-kI8W0CNGVzbGwRlwqXW3tPk8yX/view>
- https://playvs.zendesk.com/hc/en-us/articles/360026688853-Hardware-Network-Specifications-Inclusion-lists-#h_01EZRR51K1GSGAXRCZ5DRQXMDC
- <https://help.highschoolsportsleague.com/hc/en-us/articles/360024326931-Ports-Services-to-Open>
- <https://us.forums.blizzard.com/en/sc2/t/how-to-put-in-ports-number-for-blizzard-games/7533>
- https://en-america-support.nintendo.com/app/answers/detail/a_id/22272/~/how-to-set-up-a-routers-port-forwarding-for-a-nintendo-switch-console