TENNIS ESPORTS



Virtual Reality Tournament

TENNIS CANADA

Presented by

Rulebook and guide

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Event Mechanics

- **1.** The official event start date is June 19, 2023
- 2. The official event end date is August 11, 2023
- **3.** The format of the event is as follows;

Tour event	Game mode	Requirement	Location	Start date	End date
	HitEmAll VR	_	N# 4 1		
	Tournament	1x score	Virtual	June 19	July 30
Play offs	Instant match	1x best result	Virtual	June 19	July 30
Finals	Custom match	Top 2	In person	August 11	August 11

- **4.** Play offs will consist of a combination of HitEmAll and Instant Cup
- 5. The top 2 on the tournament leaderboard on July 30 will be invited to play the finals in 1 of two locations at the National Bank Open in Canada; 1 finalist in Toronto and 1 finalist in Montreal
- **6.** Final will be 1 match is best of 5 x 10 point tiebreak sets
- 7. Prizes*:
 - 1st place
 - CAD\$7500 cash for 1st place
 - CAD\$2500 in travel, accommodation and other perks Montreal or Toronto locations of the National Bank Open
 - Tennis Esports Tour points
 - 2nd place
 - CAD\$2500 in travel, accommodation and other perks Montreal or Toronto locations of the National Bank Open
 - Tennis Esports Tour points
 - Weekly winners;
 - Prize pool of CAD\$2500 in cash and other prizes distributed throughout the event for different challenges

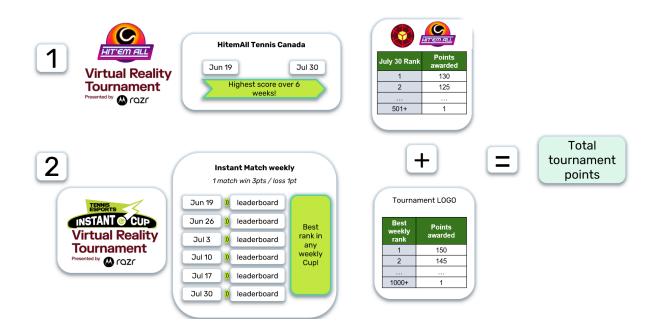
*Flight will be provided from finalists nearest international airport. Transportation to and from airport not included.



8. If players are unable to travel to compete in the finals, they will be unable to win the grand prize. A wildcard will be allocated to those players available and ranked lower than the top 2^{**}

**Esports Tennis and Tennis Canada reserve the right to pick runners up if winners are unable to travel, are suspected of contravening to rules & regulations and FairPlay rules or, at their sole discretion for any reason.

Play-offs competition structure



There are two game modes to compete in during the Playoff period.

- 1. Hit'emAll Tennis Canada VR Tournament'
- 2. 'Instant match Tennis Canada VR Tournament'

The tournament standings are calculated by awarding points to players based upon their rank

9. HitEmAll format

- To post a highscore in the playoffs, players will play HitEmAll Tennis Canada VR Tournament
- Highscores will be ranked on a leaderboard
- The rank of each player on the final day of Playoff period will determine the tournament points allocated for the HitEmAll component



	HitemAll Te	ennis Canada	HIT	
	Jun 19	Jul 30	July 30 Rank	awarded
			1	130
HIT'EM ALL		score over 6	2	125
	w	eeks!		
			501+	1

10. Instant Cup format

- Instant matches award 3 points for a win and 1 point for a loss, these points will determine your standings on the weekly instant match leaderboard
- Every Monday from June 19, this weekly leaderboard will be reset, providing players a new chance to be at the top, even if you join the tournament later
- Only your best rank on one of the weekly leaderboards will determine your tournament points allocation
- The winner from each week previous will not be a part of ANY of the following weekly leaderboards. This will result in 6 winners across 6 weeks.



INSTANT CUP - 6 CHANCES QUALIFY!

July 30 Ran 1 2 551+	k Points awarded 130 110 1	1 Points		ournam points	ent
			Leaderboard	Player	Tota
			1	Auger Aliasime	280
			2	Andrescu	260
		· · ·	3	Shapovalov	240
			4	Fernandez	
TENN	SRTS		5	Marino	
INSTA			6	Sebov	
	VIRTUALLY ANYWHERE		7	Posposil	
Best weekly	Points	2	8	Zhao	
rank	awarded		9	Bouchard	
1	150	Points	10	Galarmeau	

THE SUM OF these points will determine the overall leaderboard

Combined, these points represent your Tennis Canada VR Tournament ranking.

Example

Player 1	Rank	Points
Hit Em All	3	125
Instant match	15	115
Tournament Points		240



11. Finals format

- Finalists will compete in different locations, 1 from National Bank Open venue in Toronto and 1 from National Bank Open venue in Montreal
- The final will be held on August 11. The format is a best of five, 10-point tiebreak sets in Custom Match.
- The first to win three out of five 10-point tiebreak sets, will be the winner

12. Points Allocation

CANADA				
Rank	НТА		Rank	IC
1	130		1	150
2	125		2	145
3	120		3	140
4	115		4	135
5	110		5	130
6	105		6	128
7	103		7	126
8	101		8	124
9	99		9	122
10	97		10	120
11	96		11	119
12	95		12	118
13	94		13	117
14	93		14	116
15	92		15	115
16	91		16	114
17	90		17	113
18	89		18	112
19	88		19	111
20	87		20	110
21	86		21	109
22	85		22	108



23 84 23 24 83 24 25 82 25 26 81 26 27 80 27 28 79 28 29 78 29 30 77 30 31 76 31	107 106 105 104 103 102 101 100 99 98
25 82 25 26 81 26 27 80 27 28 79 28 29 78 29 30 77 30 31 76 31	105 104 103 102 101 100 99
26 81 26 27 80 27 28 79 28 29 78 29 30 77 30 31 76 31	104 103 102 101 100 99
27 80 27 28 79 28 29 78 29 30 77 30 31 76 31	103 102 101 100 99
28 79 28 29 78 29 30 77 30 31 76 31	102 101 100 99
29 78 29 30 77 30 31 76 31	101 100 99
30 77 30 31 76 31	100 99
31 76 31	99
75	0.2
32 75 32	90
33 74 33	97
34 73 34	96
35 72 35	95
36 71 36	94
37 70 37	93
38 69 38	92
39 68 39	91
40 67 40	90
41 66 41	89
42 65 42	88
43 64 43	87
44 63 44	86
45 62 45	85
46 61 46	84
47 60 47	83
48 59 48	82
49 58 49	81
50 57 50	80
51-55 55 51-55	78
56-60 53 56-60	76
61-65 51 61-65	74
66-70 49 66-70	72
71-75 47 71-75	70
76-80 45 76-80	68
81-85 43 81-85	66
86-90 41 86-90	64



91-95	39	91-95	62
96-100	37	 96-100	60
100-109	35	100-109	58
110-119	33	110-119	56
120-129	31	120-129	54
130-139	29	130-139	52
140-149	27	140-149	50
150-159	25	150-159	48
160-169	23	160-169	46
170-179	21	170-179	44
180-189	19	180-189	42
190-199	17	190-199	40
200-220	15	200-220	38
221-240	13	221-240	36
241-260	11	241-260	34
261-280	9	261-280	32
281-300	7	281-300	30
301-350	6	301-350	28
351-400	5	351-400	26
401-450	4	401-450	24
451-500	3	451-500	22
501-550	2	501-550	20
551+	1	551-600	18
		601-650	16
		651-700	14
		701-750	12
		751-800	10
		801-850	8
		851-900	6
		901-950	4
		951-1000	2
		1000+	1



Match Setup: Play offs

- 13. Hit em All
 - Go to Arcade
 - Go to Hitem All
 - Select Start to Tennis Canada VR Tournament
 - Set your high score!

14. Instant Match

Players must activate Instant Match by either;

- selecting the lightning symbol above the Main Menu or
- selecting Match > Instant Match within the Main Menu. See red highlights in image below.



- **15.** Players are also able to organize and create matches themselves by finding each other on Discord. There are no limits to how many different opponents a player can compete against.
- 16. Matches are only to be created in the 'Instant Match' feature from the main menu. 'Custom matches' are NOT a valid way to compete and will not earn points for the Playoffs.
- **17.** Tournament participants are responsible for scheduling matches at a time convenient for both players.
- **18.** A strong internet connection is required. A maximum required ping speed of 250 is recommended. If it is any slower it is suggested to find a better connection to avoid lag.



General Rules of [VR] Tennis

- **19.** A ball must land within bounds for play to continue; if a player hits the ball outside of bounds, this results in the loss of the point for them.
- **20.** Players/teams cannot carry the ball or catch it with the racquet.
- **21.** Players cannot hit the ball twice.
- **22.** Players must wait until the ball passes the net before they can return it.
- 23. A player that does not return a live ball before it bounces twice loses the point.
- **24.** Any ball that bounces on the lines of boundary are considered within boundaries of play.
- 25. A serve must bounce first before the receiving player can return it.

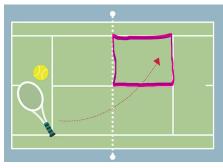
'Match Play' - 10-point tiebreak sets

- **26.** To be the winner of a match, you must be the first player to win 10 points, with an advantage of two or more points.
- **27.**Correct scoring and positioning of a 10-point match tiebreaker is automated in Tennis Esports Custom Match play
- **28.** The ball must be hit by the virtual racket, travel over the net and land within the singles bounds for play to continue; if a player hits the ball outside of bounds, this results in the loss of the point for them.
- **29.** Each player has a maximum of one bounce after the ball has been hit by their opponent to return the ball over the net and within the boundaries of the court. When a player then fails to return the ball into the correct court, the opponent wins a point.
- **30.** The Application will automatically stop the point once an action has incurred a point loss. Therefore, players should continue to play until the point has been concluded by the Application.

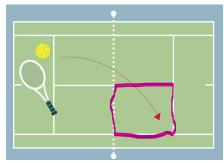


31. For every new point, each player receives 2 attempts to 'serve' the ball over the net and across the court into the square boundaries highlighted in the pictures below. If a player misses two consecutive serves, they lose the point.





Zones to serve on Deuce court



Zones to serve on Ad court

- **32.** Tie-Break Serving Order To start at a set at 0-0, Player A will start only one point by serving, on the deuce side. After the first point each player will then start two consecutive points with serving on the deuce and ad side. The serving order for a tie-break is as follows:
 - Point 1: Player A, Deuce side
 - Point 2: Player B, Ad side
 - Point 3: Player B, Deuce side
 - Point 4: Player A, Ad side
 - Point 5: Player A, Deuce side
 - Point 6: Player B, Ad side
 - Point 7: Player B, Deuce side
 - Point 8: Player A, Ad side
 - Point 9: Player A, Deuce side
 - ...



- **33.** First Service The server is allowed two chances to land their ball into the service box. The first attempt is known as the first service. Failing the first service leads to the second service.
- **34.** Second Service The second attempt is known as the second service. Failing the second service results in the loss of the point.
- **35.**Let A let is a re-do given to a player who serves although the ball hits the net cord before falling into the correct service box. You are allowed an infinite amount of lets, although it does not happen often.
- **36.**Order of Service The player/team who wins the toss serves first and creates the Custom Match in the tennis Esports App.

Fairplay and event conduct

Strike System

- **37.**Refrain from engaging in unsportsmanlike conduct with any opponent or other participant, official or spectator.
- **38.** Exercise self-control and refrain from engaging in any behavior that would endanger the health, safety or well-being of any opponent or other participant, official or spectator.
- **39.** Refrain from engaging in the use of profanity.
- **40.** Treat every opponent or other participant, official, and other attendee with respect regardless of race, creed, color, national origin, sex, sexual orientation or ability.
- **41.**Refrain from arguing with or engaging in verbal or physical threats or abuse aimed at any opponent or other participant, official or spectator.
- **42.** Respect the officials, their authority, and their calls during and after a match.
- **43.** Refrain from mistreating or damaging any aspect of the equipment.



- **44.** Ensure that play throughout is expeditious, especially in changing ends and in being ready to serve and receive service.
- **45.** Accept the decisions of referees, markers and other officials without question or protest.
- **46.** Arrive on time and prepared for every match. Over 15 minutes late will result in disqualification
- **47.** Treat opponents and fellow participants with due respect; accept success, failure, victory or defeat with good grace and without excessive display of emotion; not behave in any other way likely to bring the game into disrepute.
- **48.** Do not use banned or inappropriate performance enhancement substances.
- **49.** Players will be penalized with strikes for the above offenses.
- **50.** If a player receives 3 strikes, they will lose 25% of their accumulated points total.
- **51.** If a player receives 4 strikes they will be disqualified from the tournament.
- **52.** To report another player for committing an offense it must be reported in the 'Match-Problems' channel.
- **53.** The player accused will have 24 hours to contest the accusation before a strike is given to that player.
- **54.** If players are found to be supplying incorrect information before, during or after the event, Tennis Esports and Tennis Canada / Tennis Esports Officials reserve the right to exclude players from the tournament, and all league points and prize money earned will be forfeited.
- **55.** All players must compete in the spirit of the game and Olympic values: Excellence, friendship & respect. <u>https://olympics.com/ioc/olympic-values</u> Players not participating in this manner may be excluded from competition.
- **56.** Bullying will not be tolerated, any players found using anti-social behavior will be removed from the tournament, and all league points will be forfeited.
- **57.** Show courtesy to the community and be on time to matches that you have arranged.



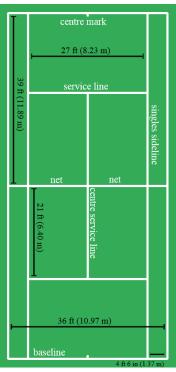
- **58.** Tennis Esports reserves the right to change any of the rules at any moment and as they see fit.
- **59.** If players are found to be behaving or conducting themselves outside of Tennis Esports in a defamatory, unsportsmanlike manner, before, during or after the event, Tennis Esports reserves the right to exclude players from the tournament, and all league points and prize money earned will be forfeited.

Virtual Tennis Boundaries and Lines

- **60.** Baseline The baselines are the lines on either end of the court that determines the boundaries of play going lengthwise. They are also where a player serves behind.
- **61.**Center Mark The center mark determines the two halves of the tennis court.
- 62. Center Line The center line divides the two service boxes into a distinct left service box and right service box on either side of the court. Landing a serve on the line is considered good.

63. Net – The net stands 3 feet and 6 inches high where the posts lie while the middle of the net is 3 feet tall, with the posts 3 feet outside of the court on either side. Hitting a ball into the net is considered an out while any ball that hits the net cord and falls onto the other side is considered good except for a serve, which allows for a re-do, or let.

- **64.** Service Line The service line separates the forecourt from the back court, and it also marks the length of the service box.
- **65.** Singles Sideline The singles sideline is the innermost line running lengthwise and determines the boundary of play for singles matches as well as the width of the service box.





Equipment and Tennis Esports Application details

66. Meta Quest 2 Headsets

• are a strict requirement for qualification rounds and finals rounds . To play multiplayer matches, both players must use a headset, with at least 1 in the playing hand in order to swing the virtual tennis racquet

67. Controller Attachment

 is strongly recommended for qualification rounds and a strict requirement for finals rounds. The Official controller attachment is the HelloReal Pro Swing Tennis <u>https://www.helloreal.com/products/proswingtennis</u>

68. Grips -

• it is recommended to use a traditional tennis grip of the players choosing to be used on the HelloReal Pro Swing Tennis VR Controller Attachment.

69. There can be no objects or devices

 on the controller apart from the recommended HelloReal Racquet Controller devices and identification material that does not interfere with play such as stickers

70. Tennis Esports Application

• Tennis Esports is a virtual reality Application that simulates tennis on the Oculus Quest App Store <u>See the link to download here</u>.

To find out more about Tennis Esports in general,

- <u>Website</u>
- Instagram
- <u>TikTok</u>
- <u>YouTube</u>
- <u>Twitter</u>
- <u>LinkedIn</u>

71. Virtual Reality Racquet –

• using the Meta Quest 2 Headset and controller with the Tennis Esports App, players will have 1x virtual tennis racquet in one hand. Players will select their preferred hand inside the Application upon login or within settings.



The virtual tennis racquet consists of a handle, a frame, and strings that are bound in a crisscross weaving pattern, simulating typical size and dimensions of traditional, real tennis racquets; A racquet's frame typically should not exceed 32 inches in length, with a handle no longer than 12.5 inches in width, and a surface no more than 15.5 inches in overall length or 11.5 inches in width.

72. Virtual Reality Ball –

• The tennis ball is yellow in color simulating typical size and dimensions of traditional, real tennis balls with measurements of 2-1/2 to 2-5/8 inches in diameter and weighing anywhere from 2 to 2-1/16 ounces. The elasticity of the ball and the uniform outer surface are also simulated. See more in point 68. Players must disable the ball bounce visualization.

73. Virtual Reality tennis physics

• is produced by Tennis Esports VR Application in collaboration with the technical university of Vienna to create an immersive user experience when striking a ball in VR.

The team created a collision model that is capable of real time predictions of the ball velocity and ball spin after ground and racket impact; identifying relevant effects and associated parameters influencing the impact behavior.

During an impact between a tennis ball and a racket, several effects occur such as strong deformations of the ball, vibrations of the racket and overspin effet to name just a few of them. All these particular processes make the impact a quite complex dynamic programme.

With our mathematical model, the Tennis Esports Application simulates different ball types, rackets, and environments seamlessly in real-time multiplayer tennis matches in VR, even if players are on opposite sides of the globe.

Find out more about at this link

