**NOTE: game.id = season + type + game number (e.g. “2017020001” is the 0001 game in 2017 season, 02 = regular game)**

**Plays data (this is what you will primarily use)**

1. vF\_game\_plays\_2017\_18
   1. **Description:** Play level data
   2. **Key**
      1. Game.id
      2. about.eventIdx
   3. **Columns**
      1. game.id
      2. about.period – period of game that the play occurred
      3. result.eventTypeId – play type ID (e.g. SHOT)
      4. result.secondaryType - secondary play type for shot type (e.g. wrist)
      5. result.penaltySeverity – secondary play type for penalties (e.g. minor
      6. result.strength.code - situation that a play occurred (often NA)
      7. about.eventIdx
      8. about.periodType – REGULAR or OT
      9. about.periodTime – when it occurred in the game period (up to 20 minutes)
      10. about.dateTime – when it occurred in actual time
      11. about.goals.away - # goals away team had at the time
      12. about.goals.home - # goals away team had at the time
      13. coordinates.x – where it happened on the ice
      14. coordinates.y – where it happened on the ice
      15. team.id.for – team that did the play
      16. team.id.against – other team on the ice
      17. HoA – whether the team.id.for is the home or away team
      18. s.x – standardized x: orients home team on the left and away team on the right
      19. r.x – puts all plays on the right side of ice
      20. l.x – puts all plays on the left side of ice
   4. NOTE: not all games reported which sides the teams were on; therefore, some games will be missing s.x
2. vF\_teams\_DT
3. **Description:** Data.table of teams
4. **Key**
   1. Team.id
5. **Columns**
   1. team.id
   2. team.abbrev – 3 letter team abbreviation
   3. short.name - team name
   4. long.name – full team name
   5. firstYearOfPlay – year they joined the league
   6. locationName – team location
   7. franchiseId – don’t need to worry about this
   8. division.name – there are 4 divisions in the league
   9. conference.name – there are 2 conferences in the league
   10. venue.name – team arena name
   11. venue.city – team city
6. vF\_game\_plays\_players\_2017\_18
   1. **Description:** Players involved in plays
   2. **Key**
      1. Game.id
      2. eventIdx
      3. playerType
   3. **Columns**
      1. Game.id
      2. eventIdx
      3. playerType – type of player involved in a play (e.g. winner/loser for a faceoff)
      4. player.id – which player was involved as the given playerType
7. vF\_game\_teams\_stats\_2017\_18
   1. **Description:** A collection of overall team stats for each team in each game; also has a couple columns on if they won and how many periods there were
   2. **Key**
      1. Game.id
      2. Team.id
   3. **Columns**
      1. game.id
      2. HoA – were they the home or away team in that game
      3. goals – how many goals they scored
      4. pim – how many penalty minutes did they have
      5. shots – how many shots they had
      6. powerPlayPercentage – what their powerplay % was
      7. powerPlayGoals – how many powerplay goals they had
      8. powerPlayOpportunities – how many powerplay opportunities they had
      9. faceOffWinPercentage – team’s face off win % in the game
      10. blocked – how many shots they blocked in the game
      11. takeaways – how many giveaways they had in the game
      12. giveaways – how many giveaways they had in the game
      13. hits – how many hits they had in the game
      14. team.id – which team it is
      15. won – did that team win
      16. settled.in – how many periods it took
8. vF\_game\_skater\_stats\_2017\_18
   1. **Description:** A collection of individual player stats for each forward/defense player on each team in each game
   2. **Key**
      1. Game.id
      2. Team.id
      3. Player.id
   3. **Columns**
      1. game.id
      2. HoA – if the player’s team was home or away
      3. player.id – which player it is
      4. timeOnIce – how much time they spent playing
      5. assists – how many assists they had
      6. goals – how many goals they scored
      7. shots – how many shots they had
      8. hits – how many hits they had
      9. powerPlayGoals – how many power play goals they had
      10. powerPlayAssists – how many power play assists they had
      11. penaltyMinutes – how many penalty minutes they had
      12. faceOffWins – how many face offs they won
      13. faceoffTaken – how many face offs they participated in
      14. takeaways – how many times they stole the puck from the other team
      15. giveaways – how many times they gave away the puck (mistakes)
      16. shortHandedGoals – how many penalty kill goals they had
      17. shortHandedAssists – how many penalty kill assists they had
      18. blocked – how many shots they blocked
      19. plusMinus – net number of goals they were on the ice for
      20. evenTimeOnIce – how much time they spent on the ice at even strength
      21. powerPlayTimeOnIce – how much time they spent on the ice during power play
      22. shortHandedTimeOnIce – how much time they spent on the ice during penalty kill
      23. faceOffPct – what % of faceoffs they won
      24. team.id
9. vF\_game\_goalie\_stats\_2017\_18
   1. **Description:** A collection of individual player stats for each goalie on each team in each game
   2. **Key**
      1. Game.id
      2. Team.id
      3. Player.id
   3. **Columns**
      1. game.id
      2. HoA – if the player’s team was home or away
      3. player.id – which player it is
      4. timeOnIce – how much time they spent playing
      5. assists – how many assists they had
      6. goals – how many goals they scored
      7. pim – how many penalty minutes they had
      8. shots – how many shots AGAINST they had
      9. saves – how many saves they had in the game
      10. powerPlaySaves – how many power play saves they had in the game
      11. shortHandedSaves – how many penalty kill saves they had in the game
      12. evenSaves – how many even strength saves they had in the game
      13. shortHandedShotsAgainst – how many shots AGAINST they had during penalty kill
      14. evenShotsAgainst – how many shots AGAINST they had during even strength
      15. powerPlayShotsAgainst – how many shots AGAINST they had during power play
      16. decision – W for win or L for loss
      17. savePercentage - % of shots against that they saved
      18. powerPlaySavePercentage - % of shots against that they saved during power play
      19. shortHandedSavePercentage - % of shots against that they saved during penalty kill
      20. evenStrengthSavePercentage - % of shots against that they saved during even strength
      21. team.id
10. vF\_game\_info\_2017\_18
    1. **Description:** Some general game information
    2. **Key**
       1. Game.id
    3. **Columns**
       1. game.id
       2. season – what season the game is from (2017 means from the 2017-18 season)
       3. type – 02 means regular season
       4. home.win – did the home team win
       5. away.win – did the away team win
       6. settled.in – how many periods were there
       7. dateTime – when did the game happen
       8. name – name of the venue where it happened
       9. away.teamID – away team id
       10. away.goals – how many goals they scored
       11. home.teamID – home team id
       12. home.goals – how many goals they scored
11. vF\_no\_play\_data\_2017\_18
    1. **Description:** Tells which games did not have play data available
    2. **Key**
       1. Game.id
    3. **Columns**
       1. Game.id
       2. No.data – Boolean of whether there wasn’t play-level data
12. vF\_game\_periods\_2017\_18
    1. **Description:** Summary of periods in each game
    2. **Key**
       1. **game.id**
       2. **num**
    3. **Columns**
       1. game.id
       2. periodType – REGULAR or OVERTIME
       3. startTime
       4. endTime
       5. num – period number (1-4)
       6. ordinalNum – which period (1st, 2nd, 3rd, OT)
       7. home.goals - # goals scored by home team in period
       8. home.shotsOnGoal - # shots by home team in period
       9. away.goals - # goals scored by away team in period
       10. away.shotsOnGoal - # shots by home team in period
13. vF\_game\_shootout\_status\_2017\_18
    1. **Description:** Whether there was a shootout or not
    2. **Key**
       1. Game.id
    3. **Columns**
       1. Game.id
       2. Shootout – Boolean of whether there was a shootout or not

**Additional info** (might not need these)

1. vF\_player\_info
   1. **Description:** Information on every player (like age, nationality, etc.)
   2. **Key**
      1. Player.id
   3. **Columns**
      1. player.id
      2. firstName
      3. lastName
      4. primaryNumber
      5. birthDate
      6. nationality
      7. height
      8. weight
      9. active – are they currently active (as of 2019)
      10. shootsCatches – whether they are righty or lefty
      11. rosterStatus – are they currently on a team (as of 2019)
      12. currentTeam.id – what team they are currently on
      13. primaryPosition.code – what their main position is
2. vF\_team\_rosters\_2017
   1. **Description: List of data.tables with players on each team in 20172018 season (let me know if you are actually usin this; can then create it for multiple seasons)**
   2. **Key**
      1. Team.id
      2. Person.id
   3. **Columns**
      1. team.id
      2. person.id
      3. person.fullName
      4. jerseyNumber – number on the team
      5. position.code – position on the team
3. vF\_player\_season\_data
   1. **Description:** Data.table with info on all seasons for each player in the players vector. This has a TON of stats, but I don’t think we’ll need it for anything. Let me know if you do and I can detail what’s in here
   2. **Key**
   3. **Columns**

**Background info** (you probably don’t need these)

1. vF\_game\_types
   1. **Description:** Data.table of game types
   2. **Key**
      1. id
   3. **Columns**
      1. Id
      2. Description – label corresponding to ID
      3. Postseason – Boolean
2. vF\_play\_types
   1. **Description:** Data.table of play types
   2. **Key**
      1. Play.id
   3. **Columns**
      1. Play.id
      2. Play.name – better formatted version of play.id
      3. Important – flag 1/0; used to filter out the raw plays data
3. vF\_stat\_types
   1. **Description:** Data.table of stat types that can be pulled from the api
   2. **Key**
      1. displayName
   3. **Columns**
      1. displayName
4. vF\_seasons\_DT
   1. **Description:** Data.table with each season that's been recorded (only the recent ones will have play level data)
   2. **Key**
      1. seasonID
   3. **Columns**
      1. seasonID
      2. regularSeasonStartDate
      3. regularSeasonEndDate
      4. seasonEndDate
      5. numberOfGames
      6. tiesInUse
      7. olympicsParticipation
      8. conferencesInUse
      9. divisionsInUse
      10. wildCardInUse
5. vF\_all\_player\_ids\_2017
6. **Description:** Vector of player ids extracted from the roster list