

This follows official communication, shared memory reference, useful when planning to develop new AC apps.

Fields in BLUE - represent the updated structure, according to latest evolutions.

Last update on 25/04/2016

SHARED MEMORY STRUCTS

```
#pragma once
```

```
typedef int AC_STATUS;
```

```
#define AC_OFF 0
```

```
#define AC_REPLAY 1
```

```
#define AC_LIVE 2
```

```
#define AC_PAUSE 3
```

```
typedef int AC_SESSION_TYPE;
```

```
#define AC_UNKNOWN -1
```

```
#define AC_PRACTICE 0
```

```
#define AC_QUALIFY 1
```

```
#define AC_RACE 2
```

```
#define AC_HOTLAP 3
```

```
#define AC_TIME_ATTACK 4
```

```
#define AC_DRIFT 5
```

```
#define AC_DRAG 6
```

```
typedef int AC_FLAG_TYPE;
```

```
#define AC_NO_FLAG 0
```

```
#define AC_BLUE_FLAG 1
```

```
#define AC_YELLOW_FLAG 2
```

```
#define AC_BLACK_FLAG 3
```

```
#define AC_WHITE_FLAG 4
```

```
#define AC_CHECKERED_FLAG 5
```

```
#define AC_PENALTY_FLAG 6
```

```
#pragma pack(push)
```

```
#pragma pack(4)
```

```
struct SPageFilePhysics
```

```
{
```

```
int packetId = 0;
```

```
float gas = 0;
```

```
float brake = 0;
```

```

float fuel = 0;
int gear = 0;
int rpms = 0;
float steerAngle = 0;
float speedKmh = 0;
float velocity[3];
float accG[3];
float wheelSlip[4];
float wheelLoad[4];
float wheelsPressure[4];
float wheelAngularSpeed[4];
float tyreWear[4];
float tyreDirtyLevel[4];
float tyreCoreTemperature[4];
float camberRAD[4];
float suspensionTravel[4];
float drs = 0;
float tc = 0;
float heading = 0;
float pitch = 0;
float roll = 0;
float cgHeight;
float carDamage[5];
int numberOfTyresOut = 0;
int pitLimiterOn = 0;
float abs = 0;
float kersCharge = 0;
float kersInput = 0;
int autoShifterOn = 0;
float rideHeight[2];
float turboBoost = 0;
float ballast = 0;
float airDensity = 0;
};

```

```

struct SPageFileGraphic
{
int packetId = 0;
AC_STATUS status = AC_OFF;
AC_SESSION_TYPE session = AC_PRACTICE;
wchar_t currentTime[15];
wchar_t lastTime[15];
wchar_t bestTime[15];
wchar_t split[15];
int completedLaps = 0;
int position = 0;

```

```

int iCurrentTime = 0;
int iLastTime = 0;
int iBestTime = 0;
float sessionTimeLeft = 0;
float distanceTraveled = 0;
int isInPit = 0;
int currentSectorIndex = 0;
int lastSectorTime = 0;
int numberOfLaps = 0;
wchar_t tyreCompound[33];

float replayTimeMultiplier = 0;
float normalizedCarPosition = 0;
float carCoordinates[3];
float penaltyTime = 0;
AC_FLAG_TYPE flag = AC_NO_FLAG;
int idealLineOn = 0;
int isInPitLane = 0;

float surfaceGrip = 0;
};

```

```

struct SPageFileStatic
{
    wchar_t smVersion[15];
    wchar_t acVersion[15];
    // session static info
    int numberOfSessions = 0;
    int numCars = 0;
    wchar_t carModel[33];
    wchar_t track[33];
    wchar_t playerName[33];
    wchar_t playerSurname[33];
    wchar_t playerNick[33];
    int sectorCount = 0;

    // car static info
    float maxTorque = 0;
    float maxPower = 0;
    int maxRpm = 0;
    float maxFuel = 0;
    float suspensionMaxTravel[4];
    float tyreRadius[4];
    float maxTurboBoost = 0;

    float airTemp = 0;

```

```
float roadTemp = 0;
bool penaltiesEnabled = false;

float aidFuelRate = 0;
float aidTireRate = 0;
float aidMechanicalDamage = 0;
bool aidAllowTyreBlankets = false;
float aidStability = 0;
bool aidAutoClutch = false;
bool aidAutoBlip = false;
};
```

```
#pragma pack(pop)
```

SHARED MEMORY NAMES

```
physics : acpmf_physics
graphics : acpmf_graphics
static : acpmf_static
```