RDK-V RPi4 64bit migration

Repo Setup:

- repo init -u https://code.rdkcentral.com/r/manifests -b dunfell -m rdkv-nosrc.xml
- repo sync -j `nproc` --no-clone-bundle --no-tags

Build Instructions:

- MACHINE=raspberrypi4-64-rdk-hybrid source meta-cmf-raspberrypi/setup-environment
- bitbake rdk-generic-hybrid-wpe-image

Prerequisites:

Changes needed to be done till the meta layers.

	Meta Layer	Recipe	Change
1	meta-cmf-video-restricted/meta-cmf-video-restricted/	recipes-extended/websocket-ipplayer2/websocket-ipplayer2-utils_git.bb	--- a/recipes-extended/websocket-ipplayer2/websocket-ipplayer2-utils_git.bb +++ b/recipes-extended/websocket-ipplayer2/websocket-ipplayer2-utils_git.bb @@ -34,7 +34,7 @@ SRCREV = "${AUTOREV}" SRC_URI ="${CMF_GIT_ROOT}/components/generic/websocket-ipplayer2-utils;name=websocket-ipplayer2-utils;protocol=${RDK_GIT_PROTOCOL};branch=${CMF_GIT_MASTER_BRANCH}" S = "${WORKDIR}/git/" - +LDFLAGS_append_aarch64 = " -lrdkloggers" FILES_${PN} = "" FILES_${PN}-dev = "${datadir}/cmake/Modules/websocket-ipplayer2-utils/*.cmake" FILES_${PN}-dev += "${includedir}/ipp2/*.h"
2		meta-cmf-video-restricted/recipes-extended/websocket-ipplayer2/websocket-ipplayer2_git.bb	--- a/recipes-extended/websocket-ipplayer2/websocket-ipplayer2_git.bb +++ b/recipes-extended/websocket-ipplayer2/websocket-ipplayer2_git.bb @@ -25,7 +25,7 @@ SUMMARY = "MPEG Dash Client" LICENSE = "RDK" LIC_FILES_CHKSUM = "file://LICENSES.TXT;md5=9b6e7bbf5a50244b71ec3d67bd3a552d" -DEPENDS = "gstreamer1.0 libsoup-2.4 gstreamer-cxx websocketpp websocket-ipplayer2-utils-dev boost libtinyxml2" +DEPENDS = "gstreamer1.0 libsoup-2.4 gstreamer-cxx websocketpp websocket-ipplayer2-utils-dev boost libtinyxml2 rdk-logger" RDEPENDS_${PN} += "gstreamer1.0 libtinyxml2 boost-system boost-thread" SRCREV = "${AUTOREV}" @@ -42,6 +42,7 @@ S = "${WORKDIR}/git/" inherit pkgconfig cmake systemd coverity +LDFLAGS_append_aarch64 = " -lrdkloggers" PACKAGECONFIG ?= "" PACKAGECONFIG[rpi] = "-DBUILD_RDK_REFERENCE_RPI=ON, -DBUILD_RDK_REFERENCE_RPI=OFF,"
3	meta-cmf-raspberrypi/	conf/layer.conf	--- a/conf/layer.conf +++ b/conf/layer.conf @@ -23,7 +23,7 @@ LAYERDEPENDS_cmf-raspberrypi_append = " raspberrypi" require conf/distro/include/rdk-rpi.inc require conf/include/rdk-external-src-platform.inc -include include/rdk-bbmasks-##RDK_FLAVOR##-platform.inc +include include/rdk-bbmasks-rdkv-platform.inc # RDK RPI builds include gstreamer ugly plugins LICENSE_FLAGS_WHITELIST += "commercial_gstreamer1.0-plugins-ugly"

4		recipes-common/telemetry/telemetry_git.bbappend	--- a/recipes-common/telemetry/telemetry_git.bbappend +++ b/recipes-common/telemetry/telemetry_git.bbappend @@ -1 +1 @@ -CFLAGS_remove_aarch64_broadband = " -Werror" +CFLAGS_remove_aarch64 = " -Werror"
5		recipes-connectivity/bluetooth/bluetooth-mgr_git.bbappend	--- a/recipes-connectivity/bluetooth/bluetooth-mgr_git.bbappend +++ b/recipes-connectivity/bluetooth/bluetooth-mgr_git.bbappend @@ -1 +1,3 @@ EXTRA_OECONF += " --enable-pi-build " + +CFLAGS += " -Wno-error"
6		recipes-core/images/rdk-generic-hybrid-wpe-image.bbappend	--- a/recipes-core/images/rdk-generic-hybrid-wpe-image.bbappend +++ b/recipes-core/images/rdk-generic-hybrid-wpe-image.bbappend @@ -10,6 +10,9 @@ IMAGE_INSTALL_append = " \ IMAGE_INSTALL_remove = " \ westeros-init \ wpe-webkit-init \ + libcobalt \

7		recipes-support/rdkx_logger/rdkx-logger_1.0.bbappend-o	do_configure_aarch64_hybrid () {
			 sed -i "/struct rdkx_logger_module_s *rdkx_logger_module_str_to_index/d" ${S}/src/rdkx_logger_private.h
			 sed -i "/struct rdkx_logger_level_s * rdkx_logger_level_str_to_num/d" ${S}/src/rdkx_logger_private.h
			}

8	meta-cmf-video	recipes-support/rdkx_logger/rdkx-logger_1.0.bbappend	--- a/recipes-support/rdkx_logger/rdkx-logger_1.0.bbappend +++ b/recipes-support/rdkx_logger/rdkx-logger_1.0.bbappend @@ -1 +1,2 @@ EXTRA_OECONF_append = " --enable-rdkv " +CFLAGS_remove_aarch64 += " -Werror "
9	meta-cmf-raspberrypi-restricted	recipes-extended/websocket-ipplayer2/websocket-ipplayer2_git.bbappend	--- a/meta-cmf-video-restricted/recipes-extended/websocket-ipplayer2/websocket-ipplayer2_git.bbappend +++ b/meta-cmf-video-restricted/recipes-extended/websocket-ipplayer2/websocket-ipplayer2_git.bbappend @@ -25,6 +25,7 @@ FILESEXTRAPATHS_prepend := "${THISDIR}/files:" SRC_URI += "file://websocket-ipplayer.service" +LDFLAGS_append_aarch64 = " -lrdkloggers " PACKAGECONFIG += "rpi" do_install_append() {
10	meta-rdk-restricted	recipes-extended/fog/fog_git.bb	--- a/recipes-extended/fog/fog_git.bb +++ b/recipes-extended/fog/fog_git.bb @@ -34,8 +34,8 @@ CFLAGS += "${@bb.utils.contains('DISTRO_FEATURES', 'systemd', '-DUSE_SYSTEMD_JOU CFLAGS += "-D_FILE_OFFSET_BITS=64 -D_LARGEFILE64_SOURCE" CXXFLAGS += "${@bb.utils.contains('DISTRO_FEATURES', 'systemd', '-DUSE_SYSTEMD_JOURNAL_PRINT -DSD_JOURNAL_SUPPRESS_LOCATION', ' ', d)}" CXXFLAGS += "-D_FILE_OFFSET_BITS=64 -D_LARGEFILE64_SOURCE" -CFLAGS += " -DYAJL2_V2" -CXXFLAGS += " -DYAJL_V2" +CFLAGS += " -DYAJL2_V2 -Wno-error" +CXXFLAGS += " -DYAJL_V2 -Wno-error"

11	meta-rdk-video	recipes-extended/ctrlm/ctrlm-main.bb	--- a/recipes-extended/ctrlm/ctrlm-main.bb +++ b/recipes-extended/ctrlm/ctrlm-main.bb @@ -63,7 +63,7 @@ INCLUDE_DIRS = " \ " CXXFLAGS_append = " -std=c++11 -fPIC -D_REENTRANT -rdynamic -Wall -Werror ${INCLUDE_DIRS}" - +CXXFLAGS_remove_aarch64 = " -Werror" CXXFLAGS_append = "${@bb.utils.contains('DISTRO_FEATURES_RDK', 'comcast-gperftools-heapcheck-wp', ' -DFDC_ENABLED', '', d)}" CXXFLAGS_append = " -DSYSTEMD_NOTIFY"

Errors and Fixes:

	Source File	Error/ Warning	Fix
1	git/src/rtRemoteValueWriter.cpp	error: cast from 'voidPtr' {aka 'void*'} to 'uint32_t' {aka 'unsigned int'} loses precision	to.AddMember("value", (uintptr_t)(from.toVoidPtr()), doc.GetAllocator()); - rtRemoteValueWriter.cpp - line no : 144
2	git/src/rdkx_logger_level.hash	error: conflicting types for 'rdkx_logger_level_str_to_num'	Added rdkx-logger*.bbappend in meta-cmf-raspberryp
3	git/src/rdkx_logger_private.h	note: previous declaration of 'rdkx_logger_level_str_to_num' was here | 25 | struct rdkx_logger_level_s * rdkx_logger_level_str_to_num(const char *str, unsigned int len);	Added rdkx-logger*.bbappend in meta-cmf-raspberryp
4	dsVideoPort.c	In function 'dsError_t dsGetVideoPort(dsVideoPortType_t, int, int*)' cast from 'VOPHandle_t*' {aka '_VOPHandle_t*'} to 'int' loses precision	Change int -> intptr_t
5	dsDisplay.c	137:48: error: cast from 'VDISPHandle_t*' {aka '_VDISPHandle_t*'} to 'int' loses precision [-fpermissive] | 137 | *handle = (int)&_handles[m_vType][index];	Change int -> intptr_t
6	dsAudio.c	cast from 'AOPHandle_t*' {aka '_AOPHandle_t*'} to 'int' loses precision [-fpermissive] | 162 | *handle = (int)&_handles[type][index]; 62:36: error: cast from 'AOPHandle_t*' {aka '_AOPHandle_t*'} to 'int' loses precision [-fpermissive] | 62 | if ((int)&_handles[index][0] == uHandle) {	Change int -> intptr_t
7	git/src/ctrlm_xraudio_hal.c	130:6: error: conflicting types for 'xraudio_hal_available_devices_get' | 130 | bool xraudio_hal_available_devices_get(xraudio_devices_input_t *inputs, uint32_t input_qty_max, xraudio_devices_output_t *outputs, size_t output_qty_max) { | | ^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	./ctrlm_xraudio_hal.c:130:bool xraudio_hal_available_devices_get (xraudio_devices_input_t *inputs, uint32_t input_qty_max, xraudio_devices_output_t *outputs, uint32_t_t output_qty_max)
8	git/src/bt-ifce/btrCore_dbus_bluez5.c	git/include/logger/btrCore_logger.h:23:25: error: format '%d' expects argument of type 'int', but argument 6 has type 'size_t' {aka 'long unsigned int'} [-Werror=format=]	Added bbappend in meta-cmf-rasp
9	git/source/ccspinterface/rbusInterface.c	142:13: error: format '%d' expects argument of type 'int', but argument 3 has type 'size_t' {aka 'long unsigned int'} [-Werror=format=]	Added bbappend in meta-cmf-rasp - telemetry
10	git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_private.h	../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_msgtype.hash:61:1: error: conflicting types for 'xrsv_ws_nextgen_msgtype_handler_get' | In file included from ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_msgtype.hash:6: | ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_private.h:78:44: note: previous declaration of 'xrsv_ws_nextgen_msgtype_handler_get' was here | 78 | struct xrsv_ws_nextgen_msgtype_handler_s * xrsv_ws_nextgen_msgtype_handler_get (const char *str, unsigned int len); ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_tv_control.hash:61:1: error: conflicting types for 'xrsv_ws_nextgen_tv_control_handler_get' | In file included from ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_tv_control.hash:6: | ../../git/src/xrsv_ws_nextgen/xrsv_ws_nextgen_private.h:79:47: note: previous declaration of 'xrsv_ws_nextgen_tv_control_handler_get' was here	./xrsv_ws_nextgen/xrsv_ws_nextgen_private.h - commented last 2 lines

11	git/src/xrsv_ws/xrsv_ws_private.h	../../git/src/xrsv_ws/xrsv_ws_action_phone.hash:61:1: error: conflicting types for 'xrsv_ws_action_phone_handler_get' | In file included from ../../git/src/xrsv_ws/xrsv_ws_action_phone.hash:6: | ../../git/src/xrsv_ws/xrsv_ws_private.h:85:36: note: previous declaration of 'xrsv_ws_action_phone_handler_get' was here	xrsv_ws/xrsv_ws_private.h - commented last 3 lines
12	git/v4l2/westeros-sink/westeros-sink-soc.c	4508:79: error: invalid conversion from 'long long int*' to 'gint64*' {aka 'long int*'} [-fpermissive] | 4508 | if (gst_element_query_position(avsctx->audioSink, GST_FORMAT_TIME, &avTime))	long long avTime= 0 - > long int avTime= 0
13	qtbase-opensource-src-5.1.1/src/gui/opengl/qopengl.h	./../../../include/QtGui/../../../qtbase-opensource-src-5.1.1/src/gui/opengl/qopengl.h:97:17: error: conflicting declaration 'typedef GLfloat GLdouble' 97 | typedef GLfloat GLdouble; | ^~~~~~~~ In file included from /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/qtbase/5.1.1-r0/qtbase-opensource-src-5.1.1/src/plugins/platforms/kms/qkmsscreen.h:59, from /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/qtbase/5.1.1-r0/qtbase-opensource-src-5.1.1/src/plugins/platforms/kms/qkmsintegration.cpp:44: /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/qtbase/5.1.1-r0/recipe-sysroot/usr/include/GLES2/gl2ext.h:3092:16: note: previous declaration as 'typedef double GLdouble' 3092 | typedef double GLdouble;	commented typedef GLfloat GLdouble this line in qopengl.h
14	cobalt module	imizing-move -frtti -fno-exceptions -c ../../cobalt/configuration/configuration.cc -o obj/cobalt/configuration/configuration.configuration.o | In file included from ../../base/memory/singleton.h:33, | from ../../cobalt/configuration/configuration.cc:18: | ../../base/lazy_instance_helpers.h: In instantiation of 'Type* base::subtle::GetOrCreateLazyPointer(base::subtle::AtomicWord*, Type* (*)(void*), void*, void (*)(void*), void*) [with Type = cobalt::configuration::Configuration; base::subtle::AtomicWord = int]': | ../../base/memory/singleton.h:236:42: required from 'static Type* base::Singleton<Type, Traits, DifferentiatingType>::get() [with Type = cobalt::configuration::Configuration; Traits = base::LeakySingletonTraits<cobalt::configuration::Configuration>; DifferentiatingType = cobalt::configuration::Configuration]' | ../../cobalt/configuration/configuration.cc:29:70: required from here | ../../base/lazy_instance_helpers.h:83:11: error: cast from 'cobalt::configuration::Configuration*' to 'base::subtle::AtomicWord' {aka 'int'} loses precision [-fpermissive] | 83 | reinterpret_cast<subtle::AtomicWord>((*creator_func)(creator_arg)); | | ^~~~~~~ error: unrecognized command line option '-mfpu=neon' aarch64-rdk-linux-g++: error: unrecognized command line option '-mfpu=vfpv3' | aarch64-rdk-linux-g++: error: unrecognized command line option '-mfloat-abi=softfp' | aarch64-rdk-linux-g++: error: unrecognized command line option '-marm' | ninja: build stopped: subcommand failed. ../../third_party/protobuf/src/google/protobuf/arena.cc:158:113: error: cast from 'google::protobuf::Arena::Block*' to 'google::protobuf::internal::AtomicWord' {aka 'int'} loses precision [-fpermissive]	removed cobalt module
15	src/rmf_sectionfilter.cpp	../../../../git/qamsource/simgr/inband/./src/rmf_sectionfilter.cpp:641:37: error: cast from 'rmf_sf_SectionRequest_t*' {aka 'rmf_sf_SectionRequest_s*'} to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive] | 641 | ReleaseFilterRequest((uint32_t) pRequest); | | ^~~~~~~~ | ../../../../git/qamsource/simgr/inband/./src/rmf_sectionfilter.cpp: In member function 'rmf_Error rmf_SectionFilter::ReleaseFilter(uint32_t)': | ../../../../git/qamsource/simgr/inband/./src/rmf_sectionfilter.cpp:708:37: error: cast from 'rmf_sf_SectionRequest_t*' {aka 'rmf_sf_SectionRequest_s*'} to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive] | 708 | ReleaseFilterRequest ((uint32_t)pFilter_Request);	(rmf_SiServiceHandle)new_si_entry -> (uintptr_t)new_si_entry

16	./src /rmf_oobsicache. cpp	../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8980:42: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8980 | SetSourceId((rmf_SiServiceHandle)new_si_entry, input_si_entry->source_id); | | ^~~~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8983:41: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8983 | SetAppType((rmf_SiServiceHandle)new_si_entry, input_si_entry->isAppType); | | ^~~~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8984:39: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8984 | SetAppId((rmf_SiServiceHandle)new_si_entry, input_si_entry->app_id); | | ^~~~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8985:49: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8985 | SetActivationTime ((rmf_SiServiceHandle)new_si_entry, input_si_entry->activation_time); | | ^~~~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:8986:47: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 8986 | SetChannelNumber((rmf_SiServiceHandle)new_si_entry, input_si_entry->virtual_channel_number, RMF_SI_DEFAULT_CHANNEL_NUMBER); ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5852:71: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5852 | pgm->services->push_back((rmf_SiServiceHandle)new_si_entry); | | ^~~~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5856:70: error: cast from 'rmf_SiTableEntry*' to 'rmf_SiServiceHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5856 | ts->services->push_back((rmf_SiServiceHandle)new_si_entry); | | ^~~~~~~~~~~~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5890:73: error: cast from 'rmf_SiTransportStreamEntry*' to 'rmf_SiTransportStreamHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5890 | new_si_entry->ts_handle = (rmf_SiTransportStreamHandle) ts; | | ^~ | ../../../../git/qamsource/simgr/oob/./src/rmf_oobsicache.cpp:5891:62: error: cast from 'rmf_SiProgramInfo*' to 'rmf_SiProgramHandle' {aka 'unsigned int'} loses precision [-fpermissive] | 5891 | new_si_entry->program = (rmf_SiProgramHandle)pgm; | | ^~~	change the datatype int -> intptr_t
17	/usr/src/debug /websocket- ipplayer2-utils/git- r0/git/src/ipp2 /RdkLogProvider. cpp	/usr/src/debug/websocket-ipplayer2-utils/git-r0/git/src/ipp2/RdkLogProvider.cpp:34: undefined reference to `rdk_logger_init	Add -lrdkloggers in cmake in *utils source code build-raspberrypi4-64-rdk-hybrid/tmp/work /aarch64-rdk-linux/websocket-ipplayer2-utils /git-r0/git/src/ipp2/ CMakeLists.txt
18	git/src/audioCap /btrMgr_audioCap .c	In file included from ../../../git/src/audioCap/btrMgr_audioCap.c:58: | ../../../git/src/audioCap/btrMgr_audioCap.c: In function 'btrMgr_AC_rmfStatusChangeCb': | ../../../git/include/logger/btrMgr_logger.h:23:25: error: format '%d' expects argument of type 'int', but argument 5 has type 'size_t' {aka 'long unsigned int'} [-Werror=format=] | 23 | #define PREFIX(format) "%d\t: %s - " format | ../../../git/include/logger/btrMgr_logger.h:39:22: note: in definition of macro 'LOG_WARN' | 39 | fprintf (stderr, format, __VA_ARGS__);\ | ../../../git/include/logger/btrMgr_logger.h:68:53: note: in expansion of macro 'PREFIX' | 68 | #define BTRMGRLOG_WARN(format, ...) LOG_WARN(PREFIX (format), __LINE__, __FUNCTION__, ##__VA_ARGS__) | ../../../git/src/audioCap/btrMgr_audioCap.c:1270:13: note: in expansion of macro 'BTRMGRLOG_WARN' | 1270 | BTRMGRLOG_WARN("Status Changed - Fifo Depth = %d\n", lstBtrMgrRmfAcStatus.fifoDepth); | ../../../git/src/audioCap/btrMgr_audioCap.c:1270:60: note: format string is defined here | cc1: all warnings being treated as errors	Add CFLAGS in bbappend in meta-cmf-rasp

19	git/src/tcjson.cpp	../git/src/tcjson.cpp:175:20: error: invalid conversion from 'int (*)(void*, const char*, unsigned int)' to 'int (*)(void*, const char*, size_t)' {aka 'int (*)(void*, const char*, long unsigned int)'} [-fpermissive] | 175 | ParserContext::parse_number, | | ~~~~~~~~~~~~~~~^~~~~~~~~~~~ | | int (*)(void*, const char*, unsigned int) | ../git/src/tcjson.cpp:176:20: error: invalid conversion from 'int (*)(void*, const unsigned char*, unsigned int)' to 'int (*)(void*, const unsigned char*, size_t)' {aka 'int (*)(void*, const unsigned char*, long unsigned int)'} [-fpermissive] | 176 | ParserContext::parse_string, | | ~~~~~~~~~~~~~~~^~~~~~~~~~~~ | | int (*)(void*, const unsigned char*, unsigned int) | ../git/src/tcjson.cpp:178:20: error: invalid conversion from 'int (*)(void*, const unsigned char*, unsigned int)' to 'int (*)(void*, const unsigned char*, size_t)' {aka 'int (*)(void*, const unsigned char*, long unsigned int)'} [-fpermissive] | 178 | ParserContext::parse_map_key, | | ~~~~~~~~~~~~~~~^~~~~~~~~~~~ | | int (*)(void*, const unsigned char*, unsigned int) | ../git/src/tcjson.cpp: In member function 'std::string TcJson::toString(bool) const': | ../git/src/tcjson.cpp:700:31: error: cannot convert 'unsigned int*' to 'size_t*' {aka 'long unsigned int*'} | 700 | yajl_gen_get_buf(g, &buf, &len); | | ^~~~ | | unsigned int*	Modified error lines in tcjson.cpp in fog comp change the datatype accordingly
20	RDKShell.cpp	error: cannot bind non-const lvalue reference of type 'uint32_t&' {aka 'unsigned int&'} to an rvalue of type 'uint32_t' {aka 'unsigned int'}	CompositorController::screenShot(data, (unsigned int&)size) - RDKShell.cpp - rdkservice comp
21	git/Source/WebCore/platform/ttsclient/PlatformSpeechSynthesizerTTSClient.cpp	git/Source/WebCore/platform/ttsclient/PlatformSpeechSynthesizerTTSClient.cpp:185:40: error: cast from 'WebCore::PlatformSpeechSynthesisUtterance*' to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive] 185 | sdata.id = (uint32_t)utterance.get(); git/Source/WebCore/platform/ttsclient/PlatformSpeechSynthesizerTTSClient.cpp:223:77: error: cast from 'WebCore::PlatformSpeechSynthesisUtterance*' to 'uint32_t' {aka 'unsigned int'} loses precision [-fpermissive]	uint32_t -> uintptr_t
22	git/src/ctrlm_database.cpp	./../git/src/ctrlm_database.cpp:1433:88: error: invalid conversion from 'guint64*' {aka 'long unsigned int*'} to 'sqlite_uint64*' {aka 'long long unsigned int*'} [-fpermissive] 1433 | ctrlm_db_read_uint64(CTRLM_DB_TABLE_CTRLMGR, CTRLM_DB_DEVICE_UPDATE_KEY_SESSION_ID, &device_update_session_id); | ^~~~~~~~~~~~~~~~~~~~~~~~~~ | guint64* {aka long unsigned int*} ../../git/src/ctrlm_database.cpp:732:78: note: initializing argument 3 of 'int ctrlm_db_read_uint64(const char*, const char*, sqlite_uint64*)' 732 | int ctrlm_db_read_uint64(const char *table, const char *key, sqlite_uint64 *value) { | ~~~~~~~~~~~~~~~~^~~~~ ../../git/src/ctrlm_database.cpp: In function 'void ctrlm_db_rf4ce_read_polling_methods (ctrlm_network_id_t, ctrlm_controller_id_t, guint8*)': ../../git/src/ctrlm_database.cpp:2306:51: error: invalid conversion from 'guint64*' {aka 'long unsigned int*'} to 'sqlite_uint64*' {aka 'long long unsigned int*'} [-fpermissive] 2306 | ctrlm_db_read_uint64(table, "polling_methods", &temp_polling_methods); | ^~~~~~~~~~~~~~~~~~~~~~	guint64 -> long long unsigned int (ctrlm_database.cpp) & remove -Werror form cxxflags

23	git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp	../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp: In static member function 'static void DSClientReqHandler::checkForUpdates()': | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:452:87: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 452 | hostIf_STBServiceHDMI *pIface = hostIf_STBServiceHDMI::getInstance((int) elem->data); | | ^~~~ | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:464:101: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 464 | hostIf_STBServiceVideoOutput *pIface = hostIf_STBServiceVideoOutput:: getInstance((int)elem->data); | | ^~~~ | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:476:103: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 476 | hostIf_STBServiceVideoDecoder *pIface = hostIf_STBServiceVideoDecoder:: getInstance((int)elem->data); | | ^~~~ | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:489:112: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 489 | hostIf_STBServiceAudioInterface *pIfaceAudio = hostIf_STBServiceAudioInterface::getInstance((int)elem->data); | | ^~~~ | ../../../../git/src/hostif/handlers/src/hostIf_dsClient_ReqHandler.cpp:502:94: error: cast from 'gpointer' {aka 'void*'} to 'int' loses precision [-fpermissive] | 502 | hostIf_STBServiceSPDIF *pIfaceSPDIF = hostIf_STBServiceSPDIF::getInstance ((int)elem->data); | | ^~~~	Update hostIf_dsClient_ReqHandler. cpp change the datatype accordingly
24	git/src/hostif/handlers/src/hostIf_jsonReqHandlerThread.cpp	| ../../../../git/src/hostif/handlers/src/hostIf_jsonReqHandlerThread.cpp:154:5: error: invalid conversion from 'int (*)(void*, const char*, unsigned int)' to 'int (*)(void*, const char*, size_t)' {aka 'int (*)(void*, const char*, long unsigned int)'} [-fpermissive] | 154 | process_number, | | ^~~~~~~~~~~~~~ | | int (*)(void*, const char*, unsigned int) | ../../../../git/src/hostif/handlers/src/hostIf_jsonReqHandlerThread.cpp:155:5: error: invalid conversion from 'int (*)(void*, const unsigned char*, unsigned int)' to 'int (*)(void*, const unsigned char*, size_t)' {aka 'int (*)(void*, const unsigned char*, long unsigned int)'} [-fpermissive] | 155 | process_string, | | ^~~~~~~~~~~~~~ | | int (*)(void*, const unsigned char*, unsigned int) | ../../../../git/src/hostif/handlers/src/hostIf_jsonReqHandlerThread.cpp:157:5: error: invalid conversion from 'int (*)(void*, const unsigned char*, unsigned int)' to 'int (*)(void*, const unsigned char*, size_t)' {aka 'int (*)(void*, const unsigned char*, long unsigned int)'} [-fpermissive] | 157 | process_map_key, | | ^~~~~~~~~~~~~~~	Update hostIf_jsonReqHandlerThread.cpp

25	/tmp/work
	/aarch64-rdk-linux
	/sessionmgr/git-r0
	/git/src
	/SessionMgr.cpp
		/home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:17719:67: error: invalid conversion from 'int64_t*' {aka 'long int*'} to 'long long int*' [-fpermissive]
		
		| 17719 | if (sessionmgr_GetLongIntFromJson(item, "interval", &uid_interval)) {
		
		| | ^~~~~~~~~~~~~
		
		| | int64_t* {aka long int*}
		
		| In file included from /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid
		/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:122:
		
		| /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgrJsonHelper.h:39:90: note: initializing argument 3 of 'bool sessionmgr_GetLongIntFromJson(json_t*, const char*, long long int*)'
		
		| 39 | bool sessionmgr_GetLongIntFromJson(json_t *object, const char* name, long long *val);
		
		| | ~~~~~~~~~~~^~~
		
		| /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:17728:67: error: invalid conversion from 'int64_t*' {aka 'long int*'} to 'long long int*' [-fpermissive]
		
		| 17728 | if (sessionmgr_GetLongIntFromJson(uidParamsObject, "count", &uid_count)) {
		
		| | ^~~~~~~~~~
		
		| | int64_t* {aka long int*}
		
		| In file included from /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid
		/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:122:
		
		| /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgrJsonHelper.h:39:90: note: initializing argument 3 of 'bool sessionmgr_GetLongIntFromJson(json_t*, const char*, long long int*)'
		
		| 39 | bool sessionmgr_GetLongIntFromJson(json_t *object, const char* name, long long *val);
		
		| | ~~~~~~~~~~~^~~
		
		| /home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:17730:74: error: invalid conversion from 'int64_t*' {aka 'long int*'} to 'long long int*' [-fpermissive]
		
		| 17730 | if (sessionmgr_GetLongIntFromJson(uidParamsObject, "interval", &uid_interval)) {
		
		| | ^~~~~~~~~~~~~
		
		/home/kpandu549/keerthana/oct27-v/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/sessionmgr/git-r0/git/src/SessionMgr.cpp:14531:84: error: call of overloaded 'addNum (const char*&, const char [5], int64_t)' is ambiguous
		
		| 14531 | response.addNum(property, "%lld", session->source->getTimeshiftBuffer());
			Update SessionMgr.cpp datatypes according to the error

26	recorder.cpp	rmfstreamer - undefined reference to `RMFiPPVSrc::purchasePPVEvent(unsigned int&)'	added stub for RMFiPPVSrc:: purchasePPVEvent(unsigned int&) in recorder.cpp

27	git/daemon
	/source/utils
	/logging.cpp
		| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/asbluetoothrcu/1.99-r0/recipe-sysroot/usr/include/qt5/QtCore/qbasicatomic.h: In instantiation of 'T QBasicAtomicInteger<T>::fetchAndAndOrdered(T) [with T = int]':
		
		| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/asbluetoothrcu/1.99-r0/recipe-sysroot/usr/include/qt5/QtCore/qbasicatomic.h:254:14: required from 'T QBasicAtomicInteger<T>::operator&=(T) [with T = int]'
		
		| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/asbluetoothrcu/1.99-r0/git/daemon/source/utils/logging.cpp:630:36: required from here
		
		| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/asbluetoothrcu/1.99-r0/recipe-sysroot/usr/include/qt5/QtCore/qbasicatomic.h:220:37: error: 'fetchAndAndOrdered' is not a member of 'QBasicAtomicInteger<int>::Ops' {aka 'QAtomicOps<int>'}
		
		| 220 | { return Ops::fetchAndAndOrdered(_q_value, valueToAdd); }
		
		| | ~~~~~~~~~~~~~~~~~~~~~~~^~~~~~~~~~~~~~~~~~~~~~
			g_logTargets &= ~LoggingTarget::EthanLog;
			
			change the expression to
			
			g_logTargets = (g_logTargets & ~LoggingTarget::EthanLog);

28	servicemanager module	| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/servicemanager/1.99-r0/recipe-sysroot-native/usr/bin/aarch64-rdk-linux/../../libexec/aarch64-rdk-linux/gcc/aarch64-rdk-linux/9.3.0/ld: ../servicemanager/libservicemanager.so: undefined reference to `QAbstractScrollArea::viewport() const' | collect2: error: ld returned 1 exit status | Makefile:125: recipe for target 'servicemanagerapp' failed | make[1]: *** [servicemanagerapp] Error 1	add the below changes in servicemanagerapp.pro QT += widgets QT += opengl Path : servicemanager/1.99-r0/git/build/servicemanagerapp/servicemanagerapp.pro
29	git/src/helpers/jsonwriter.cpp	| ../../git/src/helpers/jsonwriter.cpp: In member function 'QString JSONWriter::write(const QVariantHash&)': | ../../git/src/helpers/jsonwriter.cpp:71:49: error: cannot convert 'unsigned int*' to 'size_t*' {aka 'long unsigned int*'} | 71 | yajl_gen_get_buf((yajl_gen) m_handle, &buf, &len); | | ^~~~ | | unsigned int* | ../../git/src/helpers/jsonwriter.cpp: In member function 'QString JSONWriter::write(const QVariantMap&)': | ../../git/src/helpers/jsonwriter.cpp:89:49: error: cannot convert 'unsigned int*' to 'size_t*' {aka 'long unsigned int*'} | 89 | yajl_gen_get_buf((yajl_gen) m_handle, &buf, &len); | | ^~~~ | | unsigned int* | /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/servicemanager/1.99-r0/recipe-sysroot/usr/include/yajl/yajl_gen.h:146:56: note: initializing argument 3 of 'yajl_gen_status yajl_gen_get_buf(yajl_gen, const unsigned char**, size_t*)' | 146 | size_t * len); | | ~~~~~~~~~^~~ | ../../git/src/helpers/jsonwriter.cpp: In member function 'QString JSONWriter::write(QVariantList&)': | ../../git/src/helpers/jsonwriter.cpp:108:49: error: cannot convert 'unsigned int*' to 'size_t*' {aka 'long unsigned int*'}	unsigned int len long unsigned int len

30	servicemanager module	| /home/pjames993/64bit_dunfell_17nov/build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/servicemanager/1.99-r0/recipe-sysroot-native/usr/bin/aarch64-rdk-linux/../../libexec/aarch64-rdk-linux/gcc/aarch64-rdk-linux/9.3.0/ld: ../servicemanager/libservicemanager.so: undefined reference to `ServiceManager::HTTPNetworkAccessManager::HTTPNetworkAccessManager(QObject*)'	comment out the below conditions in build-raspberrypi4-64-rdk-hybrid/tmp/work/aarch64-rdk-linux/servicemanager/1.99-r0/git/build/servicemanager/servicemanager.pro file
			
			#contains(DEFINES, SCREEN_CAPTURE) {
			
			# !contains(DEFINES, DISABLE_SCREEN_CAPTURE) {
			
			.
			
			.
			
			#.}
			
			#}

Known Issues:

- Accelerator Home UI (UI on TV) is not coming up consistently.
- Resolution Issues seen. Display on TV is not full screen.
- Cobalt plugin is not available in Controller UI.
- Every 50 mins reboot is observed due to Control Manager Service.

Note:

- This is page is work in progress one with change-sets will be pushed in phases of sprint.